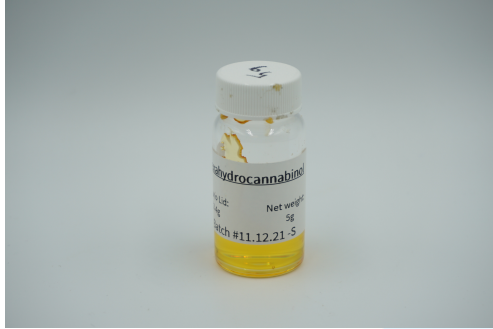


## Hexahydrocannabinol

 Sample ID: SA-220111-6587  
 Batch: 11.12.21  
 Type: In-Process Materials  
 Matrix: Concentrate - Distillate

 Received: 01/11/2022  
 Completed: 01/27/2022


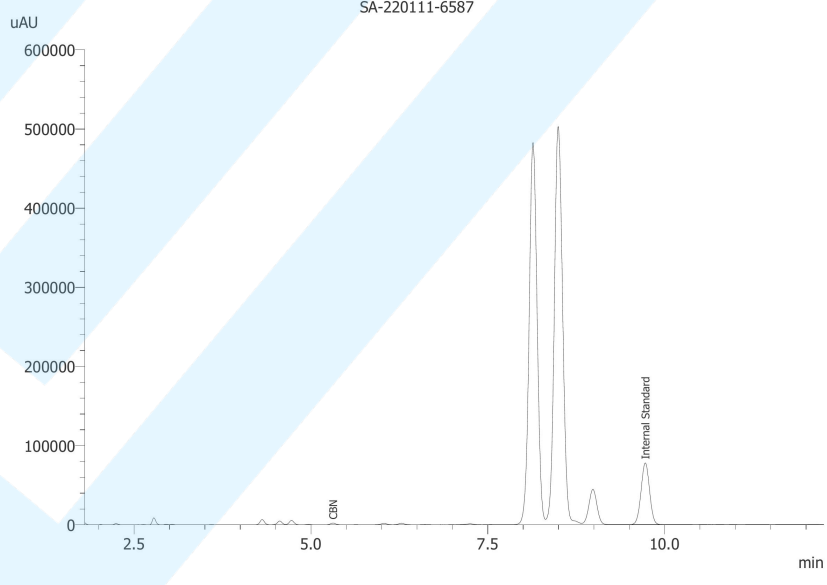
### Summary

Test	Date Tested	Status
Cannabinoids	01/27/2022	Tested
Cannabinoids (Additional)	01/26/2022	Tested
Heavy Metals	01/19/2022	Tested
Microbials	01/18/2022	Tested
Mycotoxins	01/25/2022	Tested
Pesticides	01/25/2022	Tested
Residual Solvents	01/25/2022	Tested
Terpenes	01/26/2022	Tested

### Cannabinoids by HPLC-PDA, LC-MS/MS, and/or GC-MS/MS

ND	0.0582 %	0.0582 %	Not Tested	Not Tested	Yes
Total Δ9-THC	CBN	Total Cannabinoids	Moisture Content	Foreign Matter	Internal Marker Recovered

Analyte	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)
CBC	0.0095	0.0284	ND	ND
CBCA	0.0181	0.0543	ND	ND
CBCV	0.006	0.018	ND	ND
CBD	0.0081	0.0242	ND	ND
CBDA	0.0043	0.013	ND	ND
CBDV	0.0061	0.0182	ND	ND
CBDVA	0.0021	0.0063	ND	ND
CBG	0.0057	0.0172	ND	ND
CBGA	0.0049	0.0147	ND	ND
CBL	0.0112	0.0335	ND	ND
CBLA	0.0124	0.0371	ND	ND
CBN	0.0056	0.0169	0.0582	0.582
CBNA	0.006	0.0181	ND	ND
Δ8-THC	0.0104	0.0312	ND	ND
Δ9-THC	0.0076	0.0227	ND	ND
Δ9-THCA	0.0084	0.0251	ND	ND
Δ9-THCV	0.0069	0.0206	ND	ND
Δ9-THCVA	0.0062	0.0186	ND	ND
<b>Total Δ9-THC</b>			<b>ND</b>	<b>ND</b>
<b>Total CBD</b>			<b>ND</b>	<b>ND</b>
<b>Total</b>			<b>0.0582</b>	<b>0.582</b>

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; RL = Reporting Limit; Δ = Delta; Total Δ9-THC = Δ9-THCA \* 0.877 + Δ9-THC; Total CBD = CBDA \* 0.877 + CBD;



 Generated By: Alex Morris  
 Quality Assurance Manager  
 Date: 01/28/2022



 Tested By: Scott Caudill  
 Senior Scientist  
 Date: 01/27/2022

 ISO/IEC 17025:2017 Accredited  
 Accreditation #108651

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.

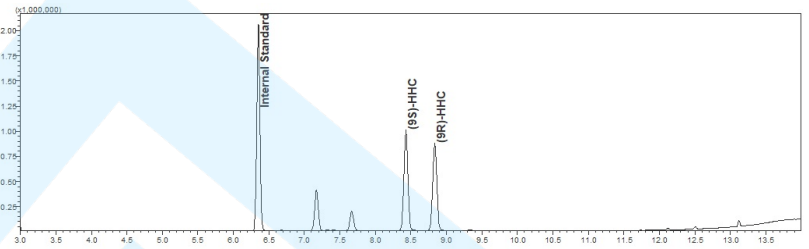
## Hexahydrocannabinol

 Sample ID: SA-220111-6587  
 Batch: 11.12.21  
 Type: In-Process Materials  
 Matrix: Concentrate - Distillate

 Received: 01/11/2022  
 Completed: 01/27/2022

## Cannabinoids by HPLC-PDA, LC-MS/MS, and/or GC-MS/MS

Analyte	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)
(6aR,9R,10aR)-HHC	0.4	2.	44.7	447.0
(6aR,9S,10aR)-HHC	0.4	2.	55.5	555.0
<b>Total Additional Cannabinoids</b>			<b>100.0</b>	<b>1000.0</b>
<b>Total</b>			<b>100.0</b>	<b>1000.0</b>



ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; RL = Reporting Limit; Δ = Delta; Total Δ9-THC = Δ9-THCA \* 0.877 + Δ9-THC; Total CBD = CBDA \* 0.877 + CBD;



 Generated By: Alex Morris  
 Quality Assurance Manager  
 Date: 01/28/2022



 Tested By: Scott Caudill  
 Senior Scientist  
 Date: 01/26/2022

 ISO/IEC 17025:2017 Accredited  
 Accreditation #108651



**KCA Laboratories**  
 232 North Plaza Drive  
 Nicholasville, KY 40356

+1-833-KCA-LABS  
<https://kcalabs.com>  
 KDA Lic.# P\_0058

**Certificate of Analysis**

**Hexahydrocannabinol**

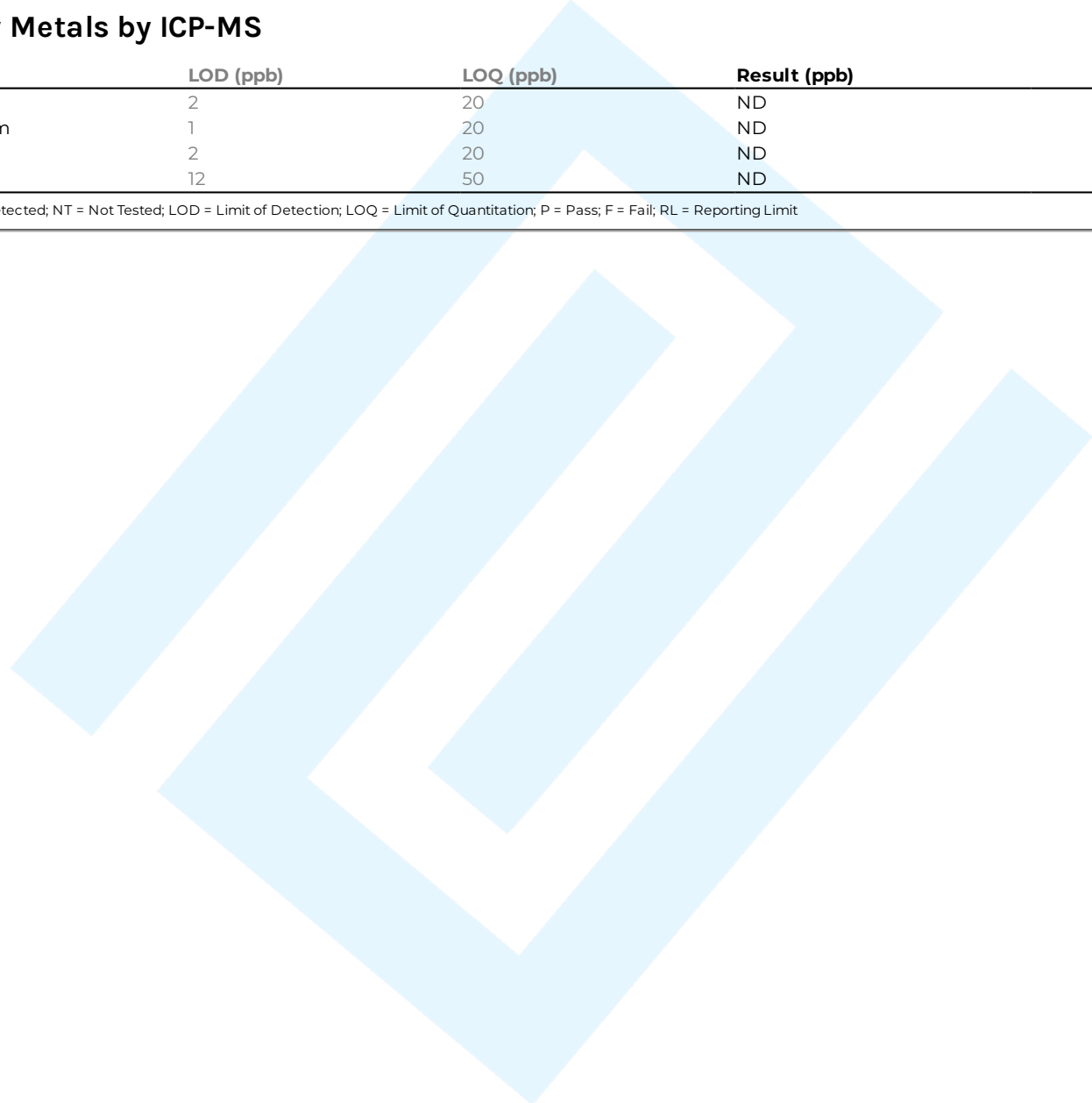
Sample ID: SA-220111-6587  
 Batch: 11.12.21  
 Type: In-Process Materials  
 Matrix: Concentrate - Distillate

Received: 01/11/2022  
 Completed: 01/27/2022

**Heavy Metals by ICP-MS**

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)
Arsenic	2	20	ND
Cadmium	1	20	ND
Lead	2	20	ND
Mercury	12	50	ND

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit



Generated By: Alex Morris  
 Quality Assurance Manager  
 Date: 01/28/2022

Tested By: Nicholas Howard  
 Scientist  
 Date: 01/19/2022

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.



**KCA Laboratories**  
232 North Plaza Drive  
Nicholasville, KY 40356

+1-833-KCA-LABS  
<https://kcalabs.com>  
KDA Lic.# P\_0058

**Certificate of Analysis**

**Hexahydrocannabinol**

Sample ID: SA-220111-6587  
Batch: 11.12.21  
Type: In-Process Materials  
Matrix: Concentrate - Distillate

Received: 01/11/2022  
Completed: 01/27/2022

**Pesticides by LC-MS/MS and GC-MS/MS**

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)
Abamectin	30	100	ND	Hexythiazox	30	100	ND
Acephate	30	100	ND	Imazalil	30	100	ND
Acequinocyl	30	100	ND	Imidacloprid	30	100	ND
Acetamiprid	30	100	ND	Kresoxim methyl	30	100	ND
Aldicarb	30	100	ND	Malathion	30	100	ND
Azoxystrobin	30	100	ND	Metalaxyl	30	100	ND
Bifenazate	30	100	ND	Methiocarb	30	100	ND
Bifenthrin	30	100	ND	Methomyl	30	100	ND
Boscalid	30	100	ND	Mevinphos	30	100	ND
Carbaryl	30	100	ND	Myclobutanil	30	100	ND
Carbofuran	30	100	ND	Naled	30	100	ND
Chloranthraniliprole	30	100	ND	Oxamyl	30	100	ND
Chlorfenapyr	30	100	ND	Pacllobutrazol	30	100	ND
Chlorpyrifos	30	100	ND	Permethrin	30	100	ND
Clofentezine	30	100	ND	Phosmet	30	100	ND
Coumaphos	30	100	ND	Piperonyl Butoxide	30	100	ND
Cypermethrin	30	100	ND	Prallethrin	30	100	ND
Daminozide	30	100	ND	Propiconazole	30	100	ND
Diazinon	30	100	ND	Propoxur	30	100	ND
Dichlorvos	30	100	ND	Pyrethrins	30	100	ND
Dimethoate	30	100	ND	Pyridaben	30	100	ND
Dimethomorph	30	100	ND	Spinetoram	30	100	ND
Ethoprophos	30	100	ND	Spinosad	30	100	ND
Etofenprox	30	100	ND	Spiromesifen	30	100	ND
Etoxazole	30	100	ND	Spirotetramat	30	100	ND
Fenhexamid	30	100	ND	Spiroxamine	30	100	ND
Fenoxycarb	30	100	ND	Tebuconazole	30	100	ND
Fenpyroximate	30	100	ND	Thiacloprid	30	100	ND
Fonicamid	30	100	ND	Thiamethoxam	30	100	ND
				Trifloxystrobin	30	100	ND

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit

Generated By: Alex Morris  
Quality Assurance Manager  
Date: 01/28/2022

Tested By: Jared Burkhart  
Technical Manager  
Date: 01/25/2022

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.



**KCA Laboratories**  
 232 North Plaza Drive  
 Nicholasville, KY 40356

+1-833-KCA-LABS  
<https://kcalabs.com>  
 KDA Lic.# P\_0058

**Hexahydrocannabinol**

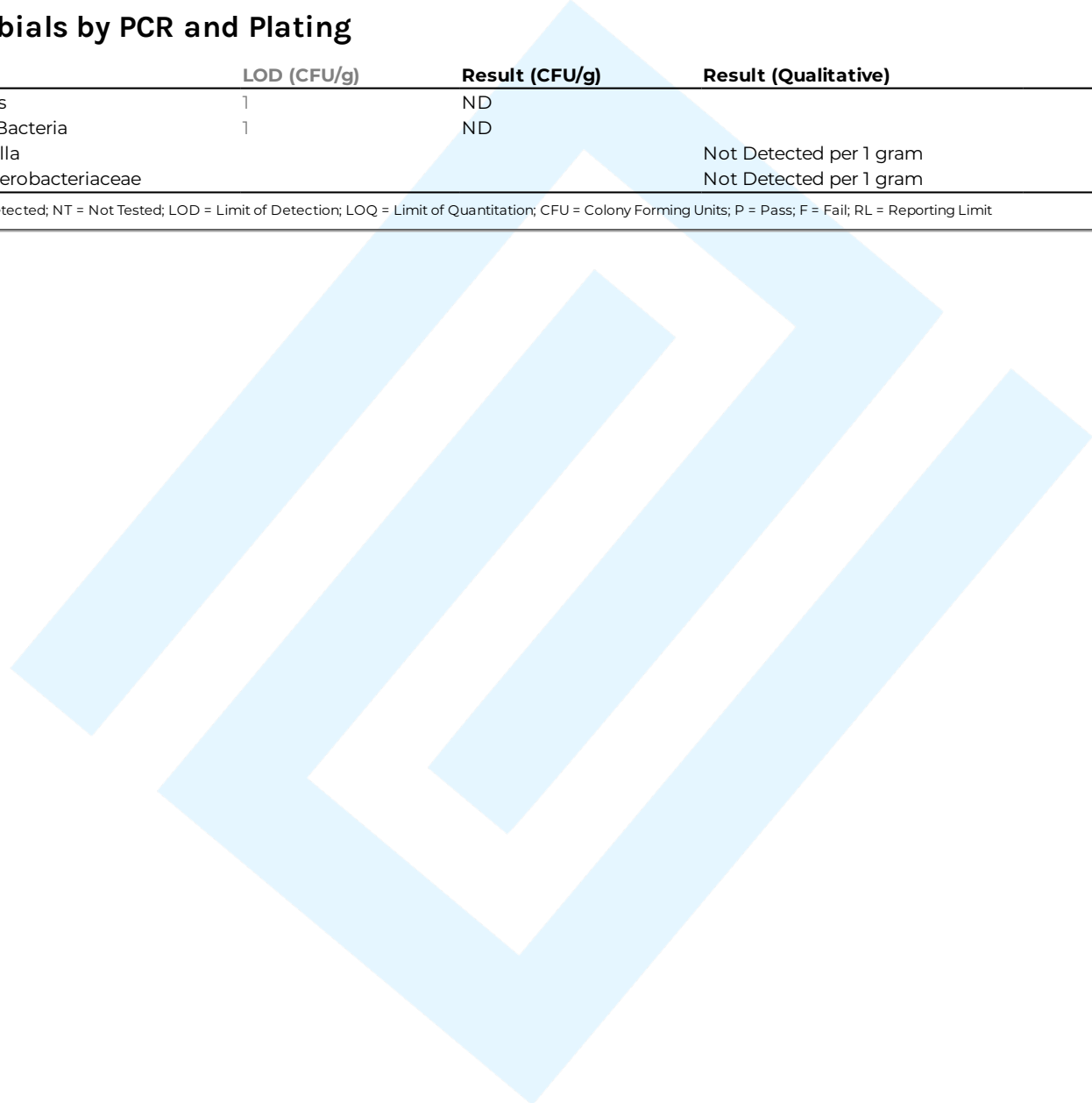
Sample ID: SA-220111-6587  
 Batch: 11.12.21  
 Type: In-Process Materials  
 Matrix: Concentrate - Distillate

Received: 01/11/2022  
 Completed: 01/27/2022

**Microbials by PCR and Plating**

Analyte	LOD (CFU/g)	Result (CFU/g)	Result (Qualitative)
Coliforms	1	ND	
Aerobic Bacteria	1	ND	
Salmonella			Not Detected per 1 gram
Total Enterobacteriaceae			Not Detected per 1 gram

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; CFU = Colony Forming Units; P = Pass; F = Fail; RL = Reporting Limit



Generated By: Alex Morris  
 Quality Assurance Manager  
 Date: 01/28/2022

Tested By: Alex Morris  
 Quality Assurance Manager  
 Date: 01/18/2022

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.



**KCA Laboratories**  
 232 North Plaza Drive  
 Nicholasville, KY 40356

+1-833-KCA-LABS  
<https://kcalabs.com>  
 KDA Lic.# P\_0058

**Hexahydrocannabinol**

Sample ID: SA-220111-6587  
 Batch: 11.12.21  
 Type: In-Process Materials  
 Matrix: Concentrate - Distillate

Received: 01/11/2022  
 Completed: 01/27/2022

**Mycotoxins by LC-MS/MS**

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)
B1	1	5	ND
B2	1	5	ND
G1	1	5	ND
G2	1	5	ND
Ochratoxin A	1	5	ND

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit

Generated By: Alex Morris  
 Quality Assurance Manager  
 Date: 01/28/2022

Tested By: Jared Burkhart  
 Technical Manager  
 Date: 01/25/2022

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.



**KCA Laboratories**  
232 North Plaza Drive  
Nicholasville, KY 40356

+1-833-KCA-LABS  
<https://kcalabs.com>  
KDA Lic.# P\_0058

**Certificate of Analysis**

**Hexahydrocannabinol**

Sample ID: SA-220111-6587  
Batch: 11.12.21  
Type: In-Process Materials  
Matrix: Concentrate - Distillate

Received: 01/11/2022  
Completed: 01/27/2022

**Residual Solvents by HS-GC-MS/MS**

Analyte	LOD (ppm)	LOQ (ppm)	Result (ppm)	Analyte	LOD (ppm)	LOQ (ppm)	Result (ppm)
Acetone	167	500	ND	Ethylene Glycol	21	62	ND
Acetonitrile	14	41	ND	Ethylene Oxide	0.5	1	ND
Benzene	0.5	1	ND	Heptane	167	500	ND
Butane	167	500	ND	n-Hexane	10	29	ND
1-Butanol	167	500	ND	Isobutane	167	500	ND
2-Butanol	167	500	ND	Isopropyl Acetate	167	500	ND
2-Butanone	167	500	ND	Isopropyl Alcohol	167	500	ND
Chloroform	2	6	ND	Isopropylbenzene	167	500	ND
Cyclohexane	129	388	ND	Methanol	100	300	ND
1,2-Dichloroethane	0.5	1	ND	2-Methylbutane	10	29	ND
1,2-Dimethoxyethane	4	10	ND	Methylene Chloride	20	60	ND
Dimethyl Sulfoxide	167	500	ND	2-Methylpentane	10	29	ND
N,N-Dimethylacetamide	37	109	ND	3-Methylpentane	10	29	ND
2,2-Dimethylbutane	10	29	ND	n-Pentane	167	500	ND
2,3-Dimethylbutane	10	29	ND	1-Pentanol	167	500	ND
N,N-Dimethylformamide	30	88	ND	n-Propane	167	500	ND
2,2-Dimethylpropane	167	500	ND	1-Propanol	167	500	ND
1,4-Dioxane	13	38	ND	Pyridine	7	20	ND
Ethanol	167	500	ND	Tetrahydrofuran	24	72	ND
2-Ethoxyethanol	6	16	ND	Toluene	30	89	ND
Ethyl Acetate	167	500	ND	Trichloroethylene	3	8	ND
Ethyl Ether	167	500	ND	Tetramethylene Sulfone	6	16	ND
Ethylbenzene	3	7	ND	Xylenes (o-, m-, and p-)	73	217	ND

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit

Generated By: Alex Morris  
Quality Assurance Manager  
Date: 01/28/2022

Tested By: Scott Caudill  
Senior Scientist  
Date: 01/25/2022

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.



**KCA Laboratories**  
232 North Plaza Drive  
Nicholasville, KY 40356

+1-833-KCA-LABS  
<https://kcalabs.com>  
KDA Lic.# P\_0058

**Certificate of Analysis**

**Hexahydrocannabinol**

Sample ID: SA-220111-6587  
Batch: 11.12.21  
Type: In-Process Materials  
Matrix: Concentrate - Distillate

Received: 01/11/2022  
Completed: 01/27/2022

**Terpenes by HS-GC-MS/MS**

Analyte	LOD (%)	LOQ (%)	Result (%)	Analyte	LOD (%)	LOQ (%)	Result (%)
α-Bisabolol	0.00001	0.00005	ND	Limonene	0.00001	0.00005	ND
(+)-Borneol	0.00001	0.00005	ND	Linalool	0.00001	0.00005	ND
Camphene	0.00001	0.00005	ND	β-myrcene	0.00001	0.00005	ND
Camphor	0.00001	0.00005	ND	Nerol	0.00001	0.00005	ND
3-Carene	0.00001	0.00005	ND	cis-Nerolidol	0.00001	0.00005	ND
β-Caryophyllene	0.00001	0.00005	ND	trans-Nerolidol	0.00001	0.00005	ND
Caryophyllene Oxide	0.00001	0.00005	ND	Ocimene	0.00001	0.00005	ND
α-Cedrene	0.00001	0.00005	ND	α-Phellandrene	0.00001	0.00005	ND
Cedrol	0.00001	0.00005	ND	α-Pinene	0.00001	0.00005	ND
Eucalyptol	0.00001	0.00005	ND	β-Pinene	0.00001	0.00005	ND
Fenchone	0.00001	0.00005	ND	Pulegone	0.00001	0.00005	ND
Fenchyl Alcohol	0.00001	0.00005	ND	Sabinene	0.00001	0.00005	ND
Geraniol	0.00001	0.00005	ND	Sabinene Hydrate	0.00001	0.00005	ND
Geranyl Acetate	0.00001	0.00005	ND	α-Terpinene	0.00001	0.00005	ND
Guaiol	0.00001	0.00005	ND	γ-Terpinene	0.00001	0.00005	ND
Hexahydrothymol	0.00001	0.00005	ND	α-Terpineol	0.00001	0.00005	ND
α-Humulene	0.00001	0.00005	ND	γ-Terpineol	0.00001	0.00005	ND
Isoborneol	0.00001	0.00005	ND	Terpinolene	0.00001	0.00005	ND
Isopulegol	0.00001	0.00005	ND	<b>Total Terpenes (%)</b>			<b>0.000</b>

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit



Generated By: Alex Morris  
Quality Assurance Manager  
Date: 01/28/2022

Tested By: Scott Caudill  
Senior Scientist  
Date: 01/26/2022

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.





**KCA Laboratories**  
232 North Plaza Drive  
Nicholasville, KY 40356

+1-833-KCA-LABS  
<https://kcalabs.com>  
KDA Lic.# P\_0058

**Certificate of Analysis**

**Hexahydrocannabinol**

Sample ID: SA-220111-6587  
Batch: 11.12.21  
Type: In-Process Materials  
Matrix: Concentrate - Distillate

Received: 01/11/2022  
Completed: 01/27/2022

**Reporting Limit Appendix**

**Heavy Metals -**

Analyte	Limit (ppb)	Analyte	Limit (ppb)
Arsenic	200	Lead	500
Cadmium	200	Mercury	100

**Microbials -**

Analyte	Limit (CFU/g)	Analyte	Limit (CFU/g)
Coliforms	1	Aerobic Bacteria	1000

**Residual Solvents - USP 467**

Analyte	Limit (ppm)	Analyte	Limit (ppm)
Acetone	5000	Ethylene Glycol	620
Acetonitrile	410	Ethylene Oxide	1
Benzene	2	Heptane	5000
Butane	5000	n-Hexane	290
1-Butanol	5000	Isobutane	5000
2-Butanol	5000	Isopropyl Acetate	5000
2-Butanone	5000	Isopropyl Alcohol	5000
Chloroform	60	Isopropylbenzene	5000
Cyclohexane	3880	Methanol	3000
1,2-Dichloroethane	5	2-Methylbutane	290
1,2-Dimethoxyethane	100	Methylene Chloride	600
Dimethyl Sulfoxide	5000	2-Methylpentane	290
N,N-Dimethylacetamide	1090	3-Methylpentane	290
2,2-Dimethylbutane	290	n-Pentane	5000
	290	1-Pentanol	5000
N,N-Dimethylformamide	880	n-Propane	5000
2,2-Dimethylpropane	5000	1-Propanol	5000
1,4-Dioxane	380	Pyridine	200
Ethanol	5000	Tetrahydrofuran	720
2-Ethoxyethanol	160	Toluene	890
Ethyl Acetate	5000	Trichloroethylene	80
Ethyl Ether	5000	Tetramethylene Sulfone	160
Ethylbenzene	70	Xylenes (o-, m-, and p-)	2170

**Pesticides - CA BCC**

Analyte	Limit (ppb)	Analyte	Limit (ppb)
Acequinocyl	4000	Imidacloprid	3000
Acetamiprid	5000	Kresoxim methyl	1000
Aldicarb	30	Malathion	5000
Azoxystrobin	40000	Metaxyl	15000
Bifenazate	5000	Methiocarb	30
Bifenthrin	500	Methomyl	100
Boscalid	10000	Mevinphos	30
Carbaryl	500	Myclobutanil	9000
Carbofuran	30	Naled	500
Chloranthraniliprole	40000	Oxamyl	200
Chlorfenapyr	30	Pacllobutrazol	30
Chlorpyrifos	30	Permethrin	20000
Clofentezine	500	Phosmet	200
Coumaphos	30	Piperonyl Butoxide	8000
Cypermethrin	1000	Prallethrin	400
Daminozide	30	Propiconazole	20000
Diazinon	200	Propoxur	30
Dichlorvos	30	Pyrethrins	1000
Dimethoate	30	Pyridaben	3000
Dimethomorph	20000	Spinetoram	3000
Ethoprophos	30	Spinosad	3000
Etofenprox	30	Spiromesifen	12000
Etoazole	1500	Spirotetramat	13000
Fenhexamid	10000	Spiroxamine	30
Fenoxycarb	30	Tebuconazole	2000
Fenpyroximate	2000	Thiacloprid	30
Fonicamid	2000	Thiamethoxam	4500

**Mycotoxins -**

Analyte	Limit (ppm)	Analyte	Limit (ppm)
B1	20	B2	20
G1	20	G2	20
Ochratoxin A	20		

**Pesticides - CA BCC**

Analyte	Limit (ppb)	Analyte	Limit (ppb)
Abamectin	300	Hexythiazox	2000
Acephate	5000	Imazalil	30

This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 17025:2017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories can provide measurement uncertainty upon request.