



Steep Hill California

1005 PARKER STREET, BERKELEY, CA 94710 LICENSE #: C8-0000082-LIC

CERTIFICATE OF ANALYSIS

Sample Name: CBD Crystal Joint
 Steep Hill ID: BK81107
 Batch ID:
 Sample Type: PreRoll
 Date Received: 2/4/2020
 Date Reported: 2/7/2020
 Pkg. Mass: 1.47 g
 # of Servings: 1

Customer: Cultivated Minds Innovation

Cannabinoids	Residual Pesticides	Microbial Impurities	Mycotoxins	Heavy Metals	Water Activity	Residual Solvents	Foreign Material
Tested	NT	Tested	NT	NT	NT	Tested	NT



0.517 %
5.17 mg/g

7.60 mg/pkg
7.60 mg/serv

28.5 %
285 mg/g

419 mg/pkg
419 mg/serv

34.2 %
342 mg/g

504 mg/pkg
504 mg/serv

Leah Shaffer
 Chief Science Officer
 Date: 2/7/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

CERTIFICATE #: BK81107
 REVISION #: BK81107.1



Steep Hill California

1005 PARKER STREET, BERKELEY, CA 94710 LICENSE #: C8-0000082-LIC

CERTIFICATE OF ANALYSIS

Cannabinoid Results

2/6/2020

Standard potency analysis utilizing High Performance Liquid Chromatography with Photo Diode Array Detector (HPLC-PDA; SOP-068)

Analyte	%	mg/g	% (Dry)	mg/g (Dry)	mg/pkg	mg/serv	LOD mg/g	LOQ mg/g
CBD	10.3	103			151	151	0.0643	0.186
CBDA	20.8	208			305	305	0.0212	0.186
CBG	ND	ND			ND	ND	0.0275	0.186
CBN	ND	ND			ND	ND	0.00706	0.186
THC	ND	ND			ND	ND	0.0286	0.186
THCA	0.589	5.89			8.67	8.67	0.0294	0.186
CBC	0.326	3.26			4.79	4.79	0.0145	0.186
CBCA	1.52	15.2			22.4	22.4	0.00558	0.186
CBDV	0.0397	0.397			0.584	0.584	0.0628	0.372
CBDVA	0.277	2.77			4.07	4.07	0.0256	0.186
CBGA	0.420	4.20			6.18	6.18	0.0216	0.186
CBL	ND	ND			ND	ND	0.0550	0.372
CBLA	ND	ND			ND	ND	0.0223	0.186
CBNA	ND	ND			ND	ND	0.00632	0.186
delta-8-THC	ND	ND			ND	ND	0.0569	0.372
THCV	ND	ND			ND	ND	0.0405	0.372
THCVA	ND	ND			ND	ND	0.0342	0.186
Total	34.2	342			504	504		

Terpenoid Results

NT

Standard terpene analysis utilizing Gas Chromatography – Mass Spectrometry (GC-MS; SOP-069)

Analyte	%	mg/g	LOD mg/g	LOQ mg/g	Analyte	%	mg/g	LOD mg/g	LOQ mg/g
alpha-Bisabolol	NT	NT	NT	NT	Linalool	NT	NT	NT	NT
endo-Borneol	NT	NT	NT	NT	Menthol	NT	NT	NT	NT
Camphene	NT	NT	NT	NT	β-Myrcene	NT	NT	NT	NT
Camphor	NT	NT	NT	NT	Nerol	NT	NT	NT	NT
3-Carene	NT	NT	NT	NT	cis-Nerolidol	NT	NT	NT	NT
Caryophyllene Oxide	NT	NT	NT	NT	trans-Nerolidol	NT	NT	NT	NT
β-Caryophyllene	NT	NT	NT	NT	cis-beta-Ocimene	NT	NT	NT	NT
alpha-Cedrene	NT	NT	NT	NT	trans-beta-Ocimene	NT	NT	NT	NT
Cedrol	NT	NT	NT	NT	alpha-Phellandrene	NT	NT	NT	NT
Citronellol	NT	NT	NT	NT	Phytol 1	NT	NT	NT	NT
Eucalyptol	NT	NT	NT	NT	Phytol 2	NT	NT	NT	NT
alpha-Farnesene	NT	NT	NT	NT	α-Pinene	NT	NT	NT	NT
beta-Farnesene	NT	NT	NT	NT	β-Pinene	NT	NT	NT	NT
Fenchol	NT	NT	NT	NT	Pulegone	NT	NT	NT	NT
Fenchone	NT	NT	NT	NT	Sabinene	NT	NT	NT	NT
Geraniol	NT	NT	NT	NT	Sabinene Hydrate	NT	NT	NT	NT
Geranyl Acetate	NT	NT	NT	NT	alpha-Terpinene	NT	NT	NT	NT
Guaiol	NT	NT	NT	NT	gamma-Terpinene	NT	NT	NT	NT
α-Humulene	NT	NT	NT	NT	alpha-Terpineol	NT	NT	NT	NT
Isoborneol	NT	NT	NT	NT	Terpinolene	NT	NT	NT	NT
Isopulegol	NT	NT	NT	NT	Valencene	NT	NT	NT	NT
Limonene	NT	NT	NT	NT	Total	NT	NT	NT	NT

Leah Shaffer
Chief Science Officer
Date: 2/7/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

CERTIFICATE #: BK81107
REVISION #: BK81107.1



Steep Hill California

1005 PARKER STREET, BERKELEY, CA 94710 LICENSE #: C8-0000082-LIC

CERTIFICATE OF ANALYSIS

Residual Pesticides Results

NT

Residual pesticide analysis utilizing Liquid and Gas Chromatography – Mass Spectrometry (LC-MSMS + GC-MSMS; SOP-070 + SOP-080) - Limit units: µg/g

Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g	Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g
Abamectin	NT	NT	NT	NT	Fludioxonil	NT	NT	NT	NT
Acephate	NT	NT	NT	NT	Hexythiazox	NT	NT	NT	NT
Acequinocyl	NT	NT	NT	NT	Imazalil	NT	NT	NT	NT
Acetamiprid	NT	NT	NT	NT	Imidacloprid	NT	NT	NT	NT
Aldicarb	NT	NT	NT	NT	Kresoxim-methyl	NT	NT	NT	NT
Azoxystrobin	NT	NT	NT	NT	Malathion	NT	NT	NT	NT
Bifenazate	NT	NT	NT	NT	Metaxyl	NT	NT	NT	NT
Bifenthrin	NT	NT	NT	NT	Methiocarb	NT	NT	NT	NT
Boscalid	NT	NT	NT	NT	Methomyl	NT	NT	NT	NT
Captan	NT	NT	NT	NT	Methyl Parathion	NT	NT	NT	NT
Carbaryl	NT	NT	NT	NT	Mevinphos	NT	NT	NT	NT
Carbofuran	NT	NT	NT	NT	Myclobutanil	NT	NT	NT	NT
Chlorantraniliprole	NT	NT	NT	NT	Naled	NT	NT	NT	NT
Chlordane	NT	NT	NT	NT	Oxamyl	NT	NT	NT	NT
Chlorfenapyr	NT	NT	NT	NT	Paclbutrazol	NT	NT	NT	NT
Chlorpyrifos	NT	NT	NT	NT	Pentachloronitrobenzene	NT	NT	NT	NT
Clofentezine	NT	NT	NT	NT	Permethrin	NT	NT	NT	NT
Coumaphos	NT	NT	NT	NT	Phosmet	NT	NT	NT	NT
Cyfluthrin	NT	NT	NT	NT	Piperonyl Butoxide	NT	NT	NT	NT
Cypermethrin	NT	NT	NT	NT	Prallethrin	NT	NT	NT	NT
Daminozide	NT	NT	NT	NT	Propiconazole	NT	NT	NT	NT
Diazinon	NT	NT	NT	NT	Propoxur	NT	NT	NT	NT
Dichlorvos	NT	NT	NT	NT	Pyrethrins	NT	NT	NT	NT
Dimethoate	NT	NT	NT	NT	Pyridaben	NT	NT	NT	NT
Dimethomorph	NT	NT	NT	NT	Spinetoram	NT	NT	NT	NT
Ethoprophos	NT	NT	NT	NT	Spinosad	NT	NT	NT	NT
Etofenprox	NT	NT	NT	NT	Spiromesifen	NT	NT	NT	NT
Etoxazole	NT	NT	NT	NT	Spirotetramat	NT	NT	NT	NT
Fenhexamid	NT	NT	NT	NT	Spiroxamine	NT	NT	NT	NT
Fenoxycarb	NT	NT	NT	NT	Tebuconazole	NT	NT	NT	NT
Fenpyroximate	NT	NT	NT	NT	Thiacloprid	NT	NT	NT	NT
Fipronil	NT	NT	NT	NT	Thiamethoxam	NT	NT	NT	NT
Flonicamid	NT	NT	NT	NT	Trifloxystrobin	NT	NT	NT	NT

Residual Solvents Results

2/6/2020

Residual solvents and processing chemicals analysis utilizing Headspace Gas Chromatography – Mass Spectrometry (HS-GC-MS; SOP-010) - Limit units: µg/g

Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g	Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g
1,2 Dichloroethane	ND	1	0.00615	0.0877	n-Heptane	ND	5000	0.161	4.00
Acetone	< LOQ	5000	0.228	4.01	n-Hexane	ND	290	0.0482	5.02
Acetonitrile	ND	410	0.00698	0.710	Isopropanol	ND	5000	4.19	40.4
Benzene	ND	1	0.00330	0.0351	Methanol	< LOQ	3000	0.332	5.17
n-Butane	ND	5000	0.0691	0.729	Methylene Chloride	ND	1	0.00143	1.03
Chloroform	ND	1	0.00655	1.05	n-Pentane	5.58	5000	0.0344	4.02
Ethanol	ND	5000	1.70	40.3	Propane	ND	5000	0.0124	0.287
Ethyl Acetate	ND	5000	1.22	40.3	Toluene	ND	890	0.235	1.53
Ethyl Ether	ND	5000	0.0956	4.04	Total Xylenes	ND	2170	0.103	7.47
Ethylene Oxide	ND	1	0.0311	0.0868	Trichloroethylene	ND	1	0.00415	0.139

Leah Shaffer
Chief Science Officer
Date: 2/7/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

CERTIFICATE #: BK81107
REVISION #: BK81107.1



Steep Hill California

1005 PARKER STREET, BERKELEY, CA 94710 LICENSE #: C8-0000082-LIC

CERTIFICATE OF ANALYSIS

Microbial Impurities Results

2/7/2020

Microbiological screening utilizing Pathogen Dx. (PDX; SOP-076)

Analyte	Result	Limit	LOQ
Aspergillus flavus	ND	ND	Not Detected in 1 gram
Aspergillus fumigatus	ND	ND	Not Detected in 1 gram
Aspergillus niger	ND	ND	Not Detected in 1 gram
Aspergillus terreus	ND	ND	Not Detected in 1 gram
E. coli (STEC)	ND	ND	Not Detected in 1 gram
Salmonella	ND	ND	Not Detected in 1 gram

Mycotoxin Results

NT

Mycotoxin analysis utilizing Liquid Chromatography – Mass Spectrometry (LC-MSMS; SOP-070) - Limit units: µg/kg

Analyte	µg/kg	Limit	LOD µg/kg	LOQ µg/kg
Aflatoxin B1	NT	NT	NT	NT
Aflatoxin B2	NT	NT	NT	NT
Aflatoxin G1	NT	NT	NT	NT
Aflatoxin G2	NT	NT	NT	NT
Ochratoxin A	NT	NT	NT	NT
Total Aflatoxins	NT	NT	NT	NT

Heavy Metals Results

NT

Heavy metals analysis utilizing Inductively Coupled Plasma Mass Spectrometry (ICP-MS; SOP-072) - Limit units: µg/g

Analyte	µg/g	Limit	LOD µg/g	LOQ µg/g
Arsenic	NT	NT	NT	NT
Cadmium	NT	NT	NT	NT
Lead	NT	NT	NT	NT
Mercury	NT	NT	NT	NT

Foreign Material Results

NT

Foreign material analysis utilizing visual inspection (SOP-057)

Analyte	Pass/Fail
Visual Inspection	NT

Moisture Results

NT

Moisture content analysis utilizing Moisture Balance (MB; SOP-055)

Analyte	%
Moisture	NT

Water Activity Results

NT

Water Activity analysis utilizing Water Activity Meter (WAM; SOP-090) - Limit units: Aw

Analyte	Aw	Limit
Water Activity	NT	NT

<p>LOD: Limit of Detection LOQ: Limit of Quantitation NT: Not Tested ND: Not Detected</p>
--

Leah Shaffer
Chief Science Officer
Date: 2/7/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

© 2020 STEEP HILL, INC. ALL RIGHTS RESERVED

CERTIFICATE #: BK81107
REVISION #: BK81107.1

Page 4 of 5



Steep Hill California™

1005 PARKER STREET, BERKELEY, CA 94710 LICENSE #: C8-0000082-LIC

CERTIFICATE OF ANALYSIS

Photos



Leah Shaffer
Chief Science Officer
Date: 2/7/2020

The following results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.

© 2020 STEEP HILL, INC. ALL RIGHTS RESERVED

CERTIFICATE #: BK81107
REVISION #: BK81107.1

Page 5 of 5