**Cannabinoids Test** 

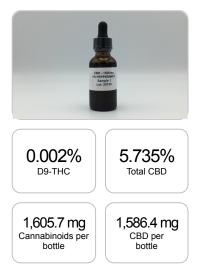
SHIMADZU INTEGRATED UPLC-PDA



Order #: 51197 Order Name: Full Spectrum 1500 Peppermint Batch#: 2012C Received: 03/18/2020 Completed: 03/23/2020 CTFO 1300 Oliver Road Suite 200 Fairfield, Ca 94534 (707)449-4567 support@myctfo.com

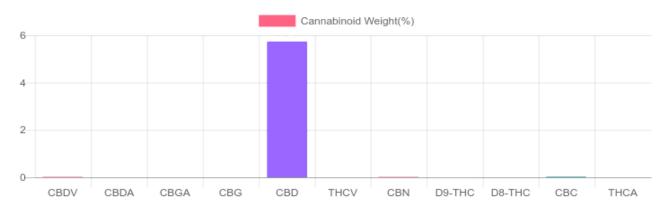


#### Sample



GSL SOP 400	PREPARED: 03/	(18/2020 15:47:40		
Cannabinoids	LOQ	weight(%)	mg/g	mg/bottle
D9-THC	10 PPM	0.002%	0.015	0.4
THCA	10 PPM	N/D	N/D	N/D
CBD	10 PPM	5.735%	57.353	1,586.4
CBDA	20 PPM	N/D	N/D	N/D
CBDV	20 PPM	0.020%	0.195	5.4
CBC	10 PPM	0.032%	0.319	8.8
CBN	10 PPM	0.017%	0.169	4.7
CBG	10 PPM	N/D	N/D	N/D
CBGA	20 PPM	N/D	N/D	N/D
D8-THC	10 PPM	N/D	N/D	N/D
THCV	10 PPM	N/D	N/D	N/D
TOTAL D9-THC		0.002%	0.002%	0.4
TOTAL CBD*		5.735%	57.353	1,586.4
TOTAL CANNABINOID	S	5.806%	58.051	1,605.7

1 bottle = 27.66 grams per bottle x Cannabinoid concentration



Reporting Limit 10 ppm \*Total CBD = CBD + CBDA x 0.877

N/D - Not Detected, B/LOQ - Below Limit of Quantification

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Blue

Ben Witten, MS, MT., Lab Director

Green Scientific Labs info@greenscientificlabs.com 1-833 TEST CBD



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.



Order #: 51197 Order Name: Full Spectrum 1500 Peppermint Batch#: 2012C Received: 03/18/2020 Completed: 03/23/2020 CTFO 1300 Oliver Road Suite 200 Fairfield, Ca 94534 (707)449-4567 support@myctfo.com



## TERPENES: TOTAL (0.070%)

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

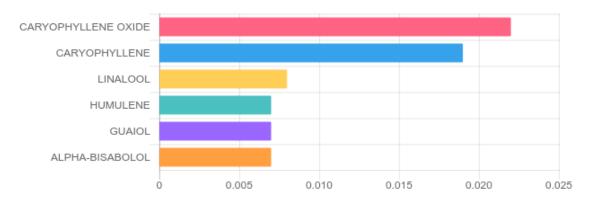
Terpene	Results (%)	LOQ (%) LOD (%)
ALPHA-BISABOLOL	0.007%	0.0067% 0.0063%
CARYOPHYLLENE	0.019%	0.0067% 0.0063%
CARYOPHYLLENE OXIDE	0.022%	0.0067% 0.0063%
GUAIOL	0.007%	0.0067% 0.0063%
HUMULENE	0.007%	0.0067% 0.0063%
LINALOOL	0.008%	0.0067% 0.0063%

GSL SOP 404 Prepared: 03/18/2020 16:06:02

## **Terpenes Breakdown**



## **Top Terpenes Results:**



#### Tested for but not present:

ALPHA-PINENE, CAMPHENE, BETA-MYRCENE, BETA-PINENE, 3-CARENE, ALPHA-TERPINENE, TRANS-BETA-OCIMENE, LIMONENE, P-CYMENE, CIS-BETA-OCIMENE, EUCALYPTOL, GAMMA-TERPINENE, TERPINOLENE, ISOPULEGOL, GERANIOL, CIS-NEROLIDOL, TRANS-NEROLIDOL

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

Green Scientific Labs info@greenscientificlabs.com 1-833 TEST CBD



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the orginal client of record.

PREPARED: 03/18/2020 16:10:20

LOD

LOQ



Order #: 51197 Order Name: Full Spectrum 1500 Peppermint Batch#: 2012C Received: 03/18/2020 Completed: 03/23/2020

CTFO 1300 Oliver Road Suite 200 Fairfield, Ca 94534 (707)449-4567 support@myctfo.com



# **PESTICIDE ANALYSIS:**

GSL SOP 401

GCMS-MS - Shimadzu GCMS-TQ8040

LCMS-MS - Shimadzu LCMS-8060

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
CAPTAN	3.000	N/D	0.003	0.001
CHLORDANE	0.100	N/D	0.003	0.001
CHLORFENAPYR	0.100	N/D	0.003	0.001
COUMAPHOS	0.100	N/D	0.003	0.001

Action Level Results

Pesticide	Action Level	Results	LOQ	LOD
resticide	(ppm)	(ppm)	(ppm)	(ppm)
ABAMECTIN B1A	0.300	N/D	0.005	0.001
ACEPHATE	3.000	N/D	0.001	0.001
ACEQUINOCYL	2.000	N/D	0.001	0.001
ACETAMIPRID	3.000	N/D	0.005	0.001
ALDICARB	0.100	N/D	0.005	0.001
AZOXYSTROBIN	3.000	N/D	0.001	0.001
BIFENAZATE	3.000	N/D	0.005	0.001
BIFENTHRIN	0.500	N/D	0.005	0.001
BOSCALID	3.000	N/D	0.005	0.001
CARBARYL	0.500	N/D	0.003	0.001
CARBOFURAN	0.100	N/D	0.001	0.001
CHLORANTRANILIPROLE	3.000	N/D	0.005	0.005
CHLORMEQUAT	0.000		0.005	0.005
CHLORIDE	3.000	N/D	0.025	0.025
CHLORPYRIFOS	0.100	N/D	0.001	0.001
CLOFENTEZINE	0.500	N/D	0.001	0.001
DAMINOZIDE	0.100	N/D	0.005	0.001
DIAZINON	0.200	N/D	0.001	0.001
DICHLORVOS	0.100	N/D	0.005	0.001
DIMETHOATE	0.100	N/D	0.001	0.001
DIMETHOMORPH	3.000	N/D	0.005	0.001
ETHOPROPHOS	0.100	N/D	0.001	0.001
ETOFENPROX	0.100	N/D	0.001	0.001
ETOXAZOLE	1.500	N/D	0.010	0.005
FENHEXAMID	3.000	N/D	0.005	0.001
FENOXYCARB	0.100	N/D	0.005	0.001
FENPYROXIMATE	2.000	N/D	0.001	0.001
FIPRONIL	0.100	N/D	0.003	0.001
FLONICAMID	2.000	N/D	0.025	0.010
FLUDIOXONIL	3.000	N/D	0.003	0.001
HEXYTHIAZOX	2.000	N/D	0.005	0.001
IMAZALIL	0.100	N/D	0.005	0.001

Pesticide	Action Level	Results	LOQ	LOD
resticide	(ppm)	(ppm)	(ppm)	(ppm)
CYFLUTHRIN	1.000	N/D	0.003	0.001
CYPERMETHRIN	1.000	N/D	0.003	0.001
PENTACHLORONITROBENZENE	E 0.200	N/D	0.003	0.001

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
IMIDACLOPRID	3.000	N/D	0.005	0.001
KRESOXIM-METHYL	1.000	N/D	0.010	0.005
MALATHION	2.000	N/D	0.005	0.001
METALAXYL	3.000	N/D	0.001	0.001
METHIOCARB	0.100	N/D	0.005	0.001
METHOMYL	0.100	N/D	0.001	0.001
MEVINPHOS	0.100	N/D	0.001	0.001
MYCLOBUTANIL	3.000	N/D	0.005	0.001
NALED	0.500	N/D	0.005	0.001
OXAMYL	0.500	N/D	0.001	0.001
PACLOBUTRAZOL	0.100	N/D	0.005	0.001
PERMETHRINS	1.000	N/D	0.005	0.001
PHOSMET	0.200	N/D	0.005	0.001
PIPERONYL BUTOXIDE	3.000	N/D	0.001	0.001
PRALLETHRIN	0.400	N/D	0.005	0.005
PROPICONAZOLE	1.000	N/D	0.010	0.005
PROPOXUR	0.100	N/D	0.001	0.001
PYRETHRINS (PYRETHRIN I)	1.000	N/D	0.005	0.005
PYRIDABEN	3.000	N/D	0.005	0.001
SPINETORAM	3.000	N/D	0.001	0.001
SPINOSAD (SPINOSYN A)	3.000	N/D	0.001	0.001
SPINOSAD (SPINOSYN D)	3.000	N/D	0.001	0.001
SPIROMESIFEN	3.000	N/D	0.005	0.001
SPIROTETRAMAT	3.000	N/D	0.001	0.001
SPIROXAMINE	0.100	N/D	0.001	0.001
TEBUCONAZOLE	1.000	N/D	0.005	0.001
THIACLOPRID	0.100	N/D	0.001	0.001
THIAMETHOXAM	1.000	N/D	0.001	0.001
TRIFLOXYSTROBIN	3.000	N/D	0.001	0.001

N/D = Not Detected, A/LOQ = Above LOQ Level, B/LOQ = Below LOQ Level, B/LOD = Below LOD Level

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

**Green Scientific Labs** info@greenscientificlabs.com 1-833 TEST CBD



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.



Order #: 51197 Order Name: Full Spectrum 1500 Peppermint Batch#: 2012C Received: 03/18/2020 Completed: 03/23/2020 CTFO 1300 Oliver Road Suite 200 Fairfield, Ca 94534 (707)449-4567 support@myctfo.com



## **RESIDUAL SOLVENTS:**

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405 Prepared: 03/18/2020 16:11:23

Residual Solvent	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ACETONE	5,000	N/D	140	20
ACETONITRILE	410	N/D	25	1
BENZENE	1	N/D	1	0.5
BUTANE	5,000	N/D	50	10
CHLOROFORM	1	N/D	1	0.5
DICHLOROETHANE	1	N/D	1	0.5
DICHLOROMETHANE	1	N/D	1	0.5
THANOL	5,000	N/D	140	20
THYL ACETATE	5,000	N/D	140	20
THYL ETHER	5,000	N/D	140	20
SOPROPYL ALCOHOL	5,000	N/D	140	20
IETHANOL	3,000	N/D	100	20
I-HEPTANE	5,000	N/D	140	20
I-HEXANE	290	N/D	18	10
PENTANE	5,000	N/D	140	20
PROPANE	5,000	N/D	20	1
OLUENE	890	N/D	53	1
RICHLOROETHENE	1	N/D	1	0.5
YLENES	150	N/D	130	20

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

Green Scientific Labs info@greenscientificlabs.com 1-833 TEST CBD



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy. Green Scientific Labs can only discuss results with the original client of record.



Order #: 51197 Order Name: Full Spectrum 1500 Peppermint Batch#: 2012C Received: 03/18/2020 Completed: 03/23/2020 CTFO 1300 Oliver Road Suite 200 Fairfield, Ca 94534 (707)449-4567 support@myctfo.com



## **Microbial Analysis:**

Microbial Analysis GSL SOP 406

Uploaded: 03/30/2020 12:22:06

PCR - Agilent AriaMX <b>Test</b>	Test Method Used	Device Used	LOD	Allowable Criteria	Actual Result	Pass/Fail
YEAST AND MOLD	USP 61/62†	ARIAMX PCR	363.05518 CFU/G**	1,000	BELOW THRESHOLD	PASS
PATHOGENIC E.COLI*	USP 61/62†	ARIAMX PCR	2 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS
STEC E.COLI*	USP 61/62†	ARIAMX PCR	2 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS
SALMONELLA*	USP 61/62†	ARIAMX PCR	5 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS
LISTERIA MONOCYTOGENES		ARIAMX PCR	2 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS

† USP 61 (enumeration of bacteria TAC, TYM, and ENT/Coliform), USP 62 (identifying specific species E.coli Aspergillus etc)

\* STEC and Salmonella run as Multiplex

\*\* CFU/g Calculation based on Select Category Type Gummy MIP/Extract Flower matrix

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

Green Scientific Labs info@greenscientificlabs.com 1-833 TEST CBD



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.



Order #: 51197 Order Name: Full Spectrum 1500 Peppermint Batch#: 2012C Received: 03/18/2020 Completed: 03/23/2020

CTFO 1300 Oliver Road Suite 200 Fairfield, Ca 94534 (707)449-4567 support@myctfo.com



## **Mycotoxin Analysis:**

LC-MS - Shimadzu LCMS-8060 GSL SOP 401

Uploaded: 03/19/2020 10:33:28

Analyte	Action Lvl (ppb)	Results (ppb)
AFLATOXIN B1	20	N/D
AFLATOXIN B2	20	N/D
AFLATOXIN G1	20	N/D
AFLATOXIN G2	20	N/D
OCHRATOXIN A	20	N/D

LOQ is 4ppb, LOD is 1ppb

#### **Moisture Analysis:**

Shimadzu MOC63U Moisture Balance - GSL SOP 411

Uploaded: 03/18/2020 14:35:07

Moisture % 2.69%

### Filth and Foreign Materials Analysis:

Microscope - Amscope Simul-Focal Trinocular Stereo Zoom Microscope - GSL SOP 409

Uploaded: 03/18/2020 15:34:53

Pass: No Foreign Materials Detected

## **Heavy Metals Analysis:**

ICP-MS - Shimadzu ICPMS-2030 GSL SOP 403

Uploaded: 03/19/2020 13:59:14

Metal	Action Level (ppb)	Result (ppb)
ARSENIC (AS)	200	B/LOQ
CADMIUM (CD)	200	B/LOQ
MERCURY (HG)	100	B/LOQ
LEAD (PB)	500	B/LOQ

Lower Limit of Quantitation (LOQ) is 75 ppb

HD-3A Water Activity Meter - GSL SOP 407

Uploaded: 03/18/2020 15:38:58

Water

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

**Green Scientific Labs** info@greenscientificlabs.com 1-833 TEST CBD



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy. Green Scientific Labs can only discuss results with the original client of record.

# Water Activity:

0.58