

CERTIFICATE OF ANALYSIS

ISO/IEC 17025:2017 ACCREDITATION #103104



Order #: 49075
 Order Name: Full Spectrum
 5000 Natural
 Batch#: 2010B
 Received: 02/17/2020
 Completed: 02/19/2020



Sample



0.034%
D9-THC

17.838%
Total CBD

5,015.9 mg
Cannabinoids per
bottle

4,933.9 mg
CBD per
bottle

1 bottle = 27.66 grams per bottle x
Cannabinoid concentration

Cannabinoids Test

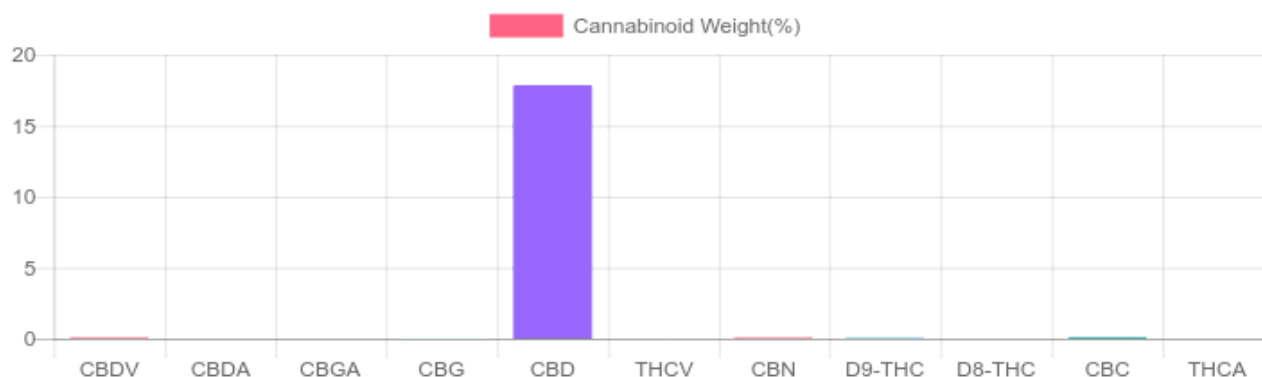
SHIMADZU INTEGRATED UPLC-PDA

GSL SOP 400

PREPARED: 02/17/2020 14:57:01

UPLOADED: 02/19/2020 08:20:05

Cannabinoids	LOQ	weight(%)	mg/g	mg/bottle
D9-THC	10 PPM	0.034%	0.345	9.5
THCA	10 PPM	N/D	N/D	N/D
CBD	10 PPM	17.838%	178.378	4,933.9
CBDA	20 PPM	N/D	N/D	N/D
CBDV	20 PPM	0.075%	0.751	20.8
CBC	10 PPM	0.112%	1.122	31.0
CBN	10 PPM	0.064%	0.640	17.7
CBG	10 PPM	0.011%	0.108	3.0
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		0.034%	0.034%	9.5
TOTAL CBD*		17.838%	178.378	4,933.9
TOTAL CANNABINOIDS		18.134%	181.344	5,015.9



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

Ben Witten, MS, MT., Lab Director

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 1-833 TEST CBD



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TERPENES: TOTAL (0.038%)

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

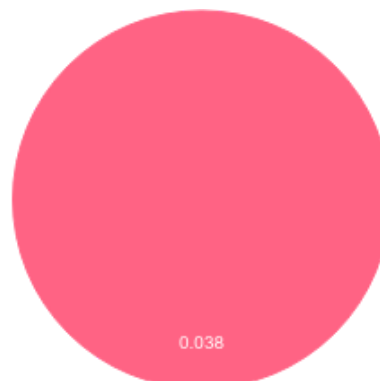
GSL SOP 404

Prepared: 02/17/2020 17:36:39

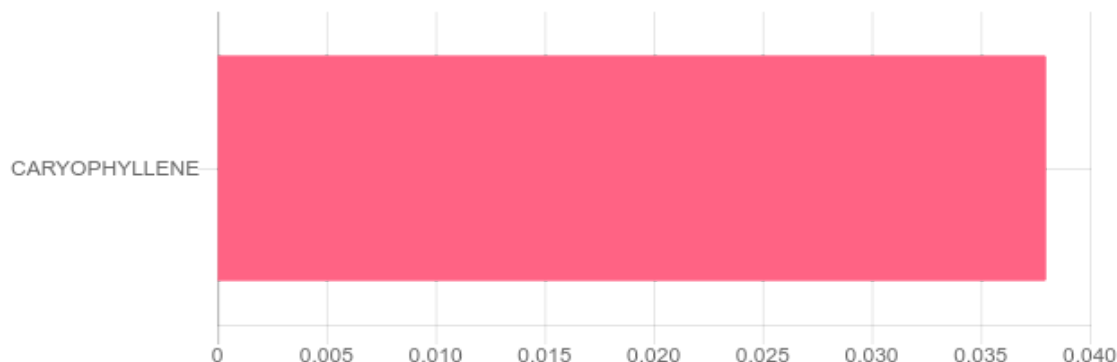
Uploaded: 02/18/2020 08:44:04

Terpene	Results (%)	LOQ (%)	LOD (%)
CARYOPHYLLENE	0.038%	0.0067%	0.0063%

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, LINALOOL, ISOPULEGOL, GERANIOL, HUMULENE, CIS-NEROLIDOL, TRANS-NEROLIDOL, GUAIOL, CARYOPHYLLENE OXIDE, ALPHA-BISABOLOL

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PESTICIDE ANALYSIS:

GSL SOP 401

PREPARED: 02/17/2020 16:22:31

UPLOADED: 02/18/2020 12:10:59

GCMS-MS - Shimadzu GCMS-TQ8040

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
CYFLUTHRIN	1.000	N/D	0.003	0.001

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
CYPERMETHRIN	1.000	N/D	0.003	0.001
FIPRONIL	0.100	N/D	0.003	0.001
FLUDIOXONIL	3.000	N/D	0.003	0.001
PENTACHLORONITROBENZENE	0.200	N/D	0.003	0.001

LCMS-MS - Shimadzu LCMS-8060

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (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	3.000	N/D	0.025	0.025
CHLORIDE				
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	0.015	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
FLONICAMID	2.000	N/D	0.025	0.010
HEXYTHIAZOX	2.000	N/D	0.005	0.001
IMAZALIL	0.100	N/D	0.005	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	3.000	N/D	0.001	0.001
BUTOXIDE				
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
(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

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RESIDUAL SOLVENTS:

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405

Prepared: 02/17/2020 18:04:23

Uploaded: 02/18/2020 09:06:22

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
ETHANOL	5,000	165	140	20
ETHYL ACETATE	5,000	N/D	140	20
ETHYL ETHER	5,000	N/D	140	20
ISOPROPYL ALCOHOL	5,000	N/D	140	20
METHANOL	3,000	N/D	100	20
N-HEPTANE	5,000	N/D	140	20
N-HEXANE	290	N/D	18	10
PENTANE	5,000	N/D	140	20
PROPANE	5,000	N/D	20	1
TOLUENE	890	N/D	53	1
TRICHLOROETHENE	1	N/D	0	0
XYLENES	2,170	N/D	130	20

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Microbial Analysis:

Microbial Analysis GSL SOP 406

Uploaded: 02/18/2020 17:10:46

PCR - Agilent AriaMX

Test	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

† 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

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Mycotoxin Analysis:

LC-MS - Shimadzu LCMS-8060
GSL SOP 401

Uploaded: 02/18/2020 12:10:58

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: 02/18/2020 11:24:39

Moisture %

3.22%

Heavy Metals Analysis:

ICP-MS - Shimadzu ICPMS-2030
GSL SOP 403

Uploaded: 02/17/2020 17:35:00

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

Water Activity:

HD-3A Water Activity Meter - GSL SOP 407

Uploaded: 02/18/2020 11:24:39

Water

0.64

Filth and Foreign Materials Analysis:

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

Uploaded: 02/17/2020 16:28:38

Pass: No Foreign Materials Detected

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