CERTIFICATE OF ANALYSIS

 PRODUCT NAME:
 CBD Tincture - Orange

 PRODUCT STRENGTH:
 1350mg

 LOT NUMBER:
 20LL006K11

 BEST BY DATE:
 7/16/2021

 HEMP EXTRACT LOT
 110419

Physical Atttributes

Test	Test Method		Results
Color	SOP-100	Golden to Amber	PASS
Odor	SOP-100	SOP-100 Characteristic - coconut and hemp, orange	
Appearance	SOP-100	Golden to Amber oil in brown glass bottle with dropper	PASS
Primary Package Eval. SOP-		Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval. SOP-132		Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

Review of Third-Party Analysis

Panel	Method	Specification	Results	Pass/Fail
Potency - Total CBD	SOP-111	427.5-562.2 mg CBD LOQ**: 10 PPM† (0.001%)	1,605.70	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	<u>ND</u>	PASS
FL Compliant Pesticide Panel	SOP-111	Florida State Hemp Program Rule 5B-57.014: Action Limits for Pesticides	ND	PASS
Microbial - Stec E.Coli SOP-111		Complies with USP 61/62	<u>>LOD</u>	PASS
Microbial - Salmonella	SOP-111	Complies with USP 61/62	<u>>LOD</u>	PASS
Microbial - Aspergillus	SOP-111	Complies with USP 61/62	>LOD	PASS
CA Compliant Heavy Metal Panel	SOP-111	Arsenic (As): ≤1.5 PPM Cadmium (Cd): ≤0.5 PPM Mercury (Hg): ≤1.0 PPM Lead (Pb): ≤0.5 PPM	≥ <u>LOQ</u>	PASS

^{*} Level of Quantitation, † Parts Per Million

	Darcis Moran	02.26.2020
Quality Certified by:		
	Darcie Moran	Date
	Director of Quality Assurance	



Order #: 48115 Order Name: 1350.Orange.006-rush Batch#: 20LL006K11 Received: 02/04/2020 Completed: 02/07/2020



LIDI OADED: 02/05/2020 10:21:51

Sample



N/D D9-THC 5.664% Total CBD

1,658.1 mg Cannabinoids per bottle

1,605.7 mg CBD per bottle

1 bottle = 30 ml per bottle x density (0.945) x Cannabinoid concentration

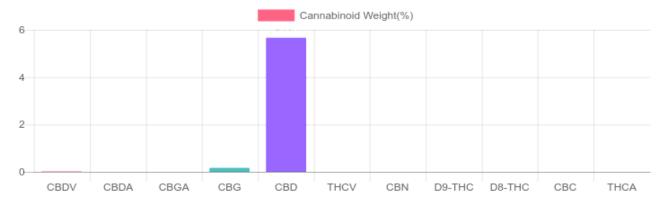
Cannabinoids Test

CEL COD 400

SHIMADZU INTEGRATED UPLC-PDA

GSL SOP 400	PREPARED: 02/04/2020 13:06:26		UPLOADED: 02/05/2020 10:31:51			
Cannabinoids	LOQ	weight(%)	mg/g	mg/bottle		
D9-THC	10 PPM	N/D	N/D	N/D		
THCA	10 PPM	N/D	N/D	N/D		
CBD	10 PPM	5.664%	56.638	1,605.7		
CBDA	20 PPM	N/D	N/D	N/D		
CBDV	20 PPM	0.017%	0.173	4.9		
CBC	10 PPM	N/D	N/D	N/D		
CBN	10 PPM	N/D	N/D	N/D		
CBG	10 PPM	0.167%	1.674	47.5		
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		N/D	N/D	N/D		
TOTAL CBD*		5.664%	56.638	1,605.7		
TOTAL CANNABINOIDS		5.848%	58.485	1,658.1		

DDEDADED: 02/04/2020 12:06:26



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

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









Order #: 48115 Order Name: 1350.Orange.006-rush Batch#: 20LL006K11 Received: 02/04/2020 Completed: 02/07/2020



PESTICIDE ANALYSIS:

GSL SOP 401 PREPARED: 02/04/2020 16:53:59 UPLOADED: 02/05/2020 15:31:03

GCMS-MS - Shimadzu GCMS-TQ8040

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
CAPTAN	0.700	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	2.000	N/D	0.003	0.001

Pesticide	Action Level	LOQ	LOD	
resticide	(ppm)	(ppm)	(ppm)	(ppm)
CYPERMETHRIN	1.000	N/D	0.003	0.001
FIPRONIL	0.100	N/D	0.003	0.001
FLUDIOXONIL	0.100	N/D	0.003	0.001
PARATHION-METHYL	0.100	N/D	0.003	0.001
PENTACHLORONITROBENZENE	0.100	N/D	0.003	0.001

LCMS-MS - Shimadzu LCMS-8060

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)	Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ABAMECTIN B1A	0.100	N/D	0.005	0.001	IMIDACLOPRID	5.000	N/D	0.005	0.001
ACEPHATE	0.100	N/D	0.001	0.001	KRESOXIM-METHYL	0.100	N/D	0.010	0.005
ACEQUINOCYL	0.100	N/D	0.001	0.001	MALATHION	0.500	N/D	0.005	0.001
ACETAMIPRID	0.100	N/D	0.005	0.001	METALAXYL	2.000	N/D	0.001	0.001
ALDICARB	0.100	N/D	0.005	0.001	METHIOCARB	0.100	N/D	0.005	0.001
AZOXYSTROBIN	0.100	N/D	0.001	0.001	METHOMYL	1.000	N/D	0.001	0.001
BIFENAZATE	0.100	N/D	0.005	0.001	MEVINPHOS	0.100	N/D	0.001	0.001
BIFENTHRIN	3.000	N/D	0.005	0.001	MYCLOBUTANIL	0.100	N/D	0.005	0.001
BOSCALID	0.100	N/D	0.005	0.001	NALED	0.100	N/D	0.005	0.001
CARBARYL	0.500	N/D	0.003	0.001	OXAMYL	0.500	N/D	0.001	0.001
CARBOFURAN	0.100	N/D	0.001	0.001	PACLOBUTRAZOL	0.100	N/D	0.005	0.001
CHLORANTRANILIPROLE	10.000	N/D	0.005	0.005	PERMETHRINS	0.500	N/D	0.005	0.001
CHLORPYRIFOS	0.100	N/D	0.001	0.001	PHOSMET	0.100	N/D	0.005	0.001
CLOFENTEZINE	0.100	N/D	0.001	0.001	PIPERONYL	3.000	N/D	0.001	0.001
DAMINOZIDE	0.100	N/D	0.005	0.001	BUTOXIDE	3.000	N/D	0.001	0.001
DIAZANON	0.100	N/D	0.001	0.001	PRALLETHRIN	0.100	N/D	0.005	0.005
DICHLORVOS	0.100	N/D	0.005	0.001	PROPICONAZOLE	0.100	N/D	0.010	0.005
DIMETHOATE	0.100	N/D	0.001	0.001	PROPOXUR	0.100	N/D	0.001	0.001
DIMETHOMORPH	2.000	N/D	0.005	0.001	PYRETHRINS	0.500	N/D	0.005	0.005
ETHOPROPHOS	0.100	N/D	0.001	0.001	(PYRETHRIN I)	0.500	N/D	0.005	0.005
ETOFENPROX	0.100	N/D	0.001	0.001	PYRIDABEN	0.100	N/D	0.005	0.001
ETOXAZOLE	0.100	N/D	0.010	0.005	SPINETORAM	0.100	N/D	0.001	0.001
FENHEXAMID	0.100	N/D	0.005	0.001	SPINOSAD	0.100	N/D	0.001	0.001
FENOXYCARB	0.100	N/D	0.005	0.001	SPIROMESIFEN	0.100	N/D	0.005	0.001
FENPYROXIMATE	0.100	N/D	0.001	0.001	SPIROTETRAMAT	0.100	N/D	0.001	0.001
FLONICAMID	0.100	N/D	0.025	0.010	SPIROXAMINE	0.100	N/D	0.001	0.001
HEXYTHIAZOX	0.100	N/D	0.005	0.001	TEBUCONAZOLE	0.100	N/D	0.005	0.001
IMAZALIL	0.100	N/D	0.005	0.001	THIACLOPRID	0.100	N/D	0.001	0.001
					THIAMETHOXAM	5.000	N/D	0.001	0.001
					TRIFLOXYSTROBIN	0.100	N/D	0.001	0.001

 ${\sf N/D} = {\sf Not\ Detected},\ {\sf A/LOQ} = {\sf Above\ LOQ\ Level},\ {\sf B/LOQ} = {\sf Below\ LOQ\ Level},\ {\sf B/LOD} = {\sf Below\ LOD\ Level}$

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

Ben Witten, MS, MT., Lab Director

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









Order #: 48115 Order Name: 1350.Orange.006-rush Batch#: 20LL006K11 Received: 02/04/2020 Completed: 02/07/2020



RESIDUAL SOLVENTS:

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405

Prepared: 02/04/2020 16:58:20 Uploaded: 02/05/2020 07:41:25

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	N/D	140	20
ETHYL ACETATE	5,000	N/D	140	20
ETHYL ETHER	5,000	N/D	140	20
SOPROPYL 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
FOLUENE	890	N/D	53	1
RICHLOROETHENE	1	N/D	0	0
(YLENES	2,170	N/D	130	20

Or Andrew Hall Ph D. Chief Scien

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

BU

Ben Witten, MS, MT., Lab Director

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









Order #: 48115 Order Name: 1350.Orange.006-rush Batch#: 20LL006K11 Received: 02/04/2020 Completed: 02/07/2020



Microbial Analysis:

Microbial Analysis GSL SOP 406

Uploaded: 02/07/2020 09:36:11

PCR - Agilent AriaMX Test	Test Method Used	Device Used	LOD	Allowable Criteria	Actual Result	Pass/Fail
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
ASPERGILLUS	USP 61/62†	ARIAMX PCR	ASP_LOD***	PRESENCE / ABSENT	BELOW LOD	PASS
YEAST AND MOLD	USP 61/62†	ARIAMX PCR	363.05518 CFU/G**	1,000	BELOW THRESHOLD	PASS
TOTAL AEROBIC BACTERIA	USP 61/62†	ARIAMX PCR	0.25316 CFU/G**	10,000	BELOW THRESHOLD	PASS
COLIFORM	USP 61/62†	ARIAMX PCR	3.41539 CFU/G**	100	BELOW THRESHOLD	PASS
ENTEROBACTERIACEAE	USP 61/62†	ARIAMX PCR	0.32951 CFU/G**	100	BELOW THRESHOLD	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

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

Ben Witten, MS, MT., Lab Director

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







^{**} CFU/g Calculation based on Select Category Type Gummy MIP/Extract Flower matrix

^{****} Flavus = 2 Copies of DNA / Fumigatis = 2 Copies of DNA Niger = 20 Copies of DNA / Terrus = 10 copies of DNA



Order #: 48115 Order Name: 1350.Orange.006-rush Batch#: 20LL006K11 Received: 02/04/2020 Completed: 02/07/2020



Mycotoxin Analysis:

LC-MS - Shimadzu LCMS-8060 GSL SOP 401

Uploaded: 02/05/2020 15:31:03

Analyte	Action LvI (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
OCHRATOXIN A	20	N/D

LOQ is 4ppb, LOD is 1ppb

Heavy Metals Analysis:

ICP-MS - Shimadzu ICPMS-2030

GSL SOP 403

Uploaded: 02/05/2020 18:15:35

Action Level (ppb)	Result (ppb)
200	B/LOQ
200	B/LOQ
100	B/LOQ
500	B/LOQ
	200 200 100

Lower Limit of Quantitation (LOQ) is 75 ppb

Water Activity:

HD-3A Water Activity Meter - GSL SOP 407

Uploaded: 02/04/2020 17:02:56

Water

0.48

Filth and Foreign Materials Analysis:

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

Uploaded: 02/04/2020 17:09:01

Pass: No Foreign Materials Detected

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

Ben Witten, MS, MT., Lab Director

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









Order #: 40909 Order Name: BSO2.110419 Batch#: BSO2.110419 Received: 11/06/2019 Completed: 11/08/2019



876.056

Sample



N/D D9-THC 83.965% Total CBD

Cannabinoids Test

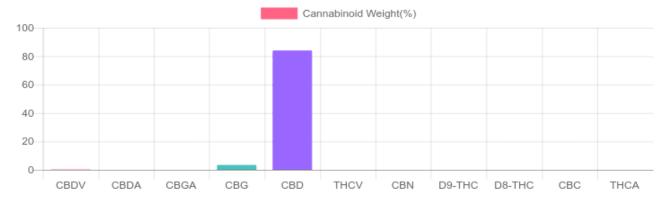
TOTAL CANNABINOIDS

SHIMADZU INTEGRATED UPLC-PDA

GSL SOP 400 PREPARED: 11/06/2019 16:53:01 UPLOADED: 11/07/2019 07:53:11 Cannabinoids LOQ weight(%) mg/g D9-THC 10 PPM N/D N/D THCA 10 PPM N/D N/D CBD 10 PPM 839.655 83.965% **CBDA** 20 PPM N/D N/D **CBDV** 20 PPM 0.231% 2.305 CBC 10 PPM N/D N/D CBN 10 PPM N/D N/D CBG 10 PPM 3.410% 34.096 **CBGA** 20 PPM N/D N/D D8-THC 10 PPM N/D N/D THCV 10 PPM N/D N/D TOTAL D9-THC N/D N/D TOTAL CBD* 839.655

83.965%

87.606%



Reporting Limit 10 ppm *Total CBD = CBD + CBDA x 0.877 N/D - Not Detected, B/LOQ - Below Limit of Quantification



4001 SW 47th Avenue Suite 208 Davie, FL 33314 1-833-TEST-CBD info@greenscientificlabs.com











Order #: 40909 Order Name: BSO2.110419 Batch#: BSO2.110419 Received: 11/06/2019 Completed: 11/08/2019



PESTICIDE ANALYSIS:

GSL SOP 401 PREPARED: 11/06/2019 11:40:45 UPLOADED: 11/07/2019 08:58:24

LCMS-MS - Shimadzu LCMS-8060

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)	Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ABAMECTIN B1A	0.100	N/D	0.005	0.001	IMAZALIL	0.100	N/D	0.005	0.001
ACEPHATE	0.100	N/D	0.001	0.001	IMIDACLOPRID	5.000	N/D	0.005	0.001
ACEQUINOCYL	0.100	N/D	0.001	0.001	KRESOXIM-METHYL	0.100	N/D	0.010	0.005
ACETAMIPRID	0.100	N/D	0.005	0.001	MALATHION	0.500	N/D	0.005	0.001
ALDICARB	0.100	N/D	0.005	0.001	METALAXYL	2.000	N/D	0.001	0.001
AZOXYSTROBIN	0.100	N/D	0.001	0.001	METHIOCARB	0.100	N/D	0.005	0.001
BIFENAZATE	0.100	N/D	0.005	0.001	METHOMYL	1.000	N/D	0.001	0.001
BIFENTHRIN	3.000	N/D	0.005	0.001	MEVINPHOS	0.100	N/D	0.001	0.001
BOSCALID	0.100	N/D	0.005	0.001	MYCLOBUTANIL	0.100	N/D	0.005	0.001
CARBARYL	0.500	N/D	0.003	0.001	NALED	0.100	N/D	0.005	0.001
CARBOFURAN	0.100	N/D	0.001	0.001	OXAMYL	0.500	N/D	0.001	0.001
CHLORANTRANILIPROLE	10.000	N/D	0.005	0.005	PACLOBUTRAZOL	0.100	N/D	0.005	0.001
CHLORPYRIFOS	0.100	N/D	0.001	0.001	PERMETHRINS	0.500	N/D	0.005	0.001
CLOFENTEZINE	0.100	N/D	0.001	0.001	PHOSMET	0.100	N/D	0.005	0.001
DAMINOZIDE	0.100	N/D	0.005	0.001	PIPERONYL	3.000	N/D	0.001	0.001
DIAZANON	0.100	N/D	0.001	0.001	BUTOXIDE	3.000	IN/D	0.001	0.001
DICHLORVOS	0.100	N/D	0.005	0.001	PRALLETHRIN	0.100	N/D	0.005	0.005
DIMETHOATE	0.100	N/D	0.001	0.001	PROPICONAZOLE	0.100	N/D	0.010	0.005
DIMETHOMORPH	2.000	N/D	0.005	0.001	PROPOXUR	0.100	N/D	0.001	0.001
ETHOPROPHOS	0.100	N/D	0.001	0.001	PYRETHRINS	0.500	N/D	0.005	0.005
ETOFENPROX	0.100	N/D	0.001	0.001	(PYRETHRIN I)		IVD	0.000	
ETOXAZOLE	0.100	N/D	0.010	0.005	PYRIDABEN	0.100	N/D	0.005	0.001
FENHEXAMID	0.100	N/D	0.005	0.001	SPINETORAM	0.100	N/D	0.001	0.001
FENOXYCARB	0.100	N/D	0.005	0.001	SPINOSAD	0.100	N/D	0.001	0.001
FENPYROXIMATE	0.100	N/D	0.001	0.001	SPIROMESIFEN	0.100	N/D	0.005	0.001
FIPRONIL	0.100	N/D	0.003	0.001	SPIROTETRAMAT	0.100	N/D	0.001	0.001
FLONICAMID	0.100	N/D	0.025	0.010	SPIROXAMINE	0.100	N/D	0.001	0.001
FLUDIOXONIL	0.100	N/D	0.003	0.001	TEBUCONAZOLE	0.100	0.010	0.005	0.001
HEXYTHIAZOX	0.100	N/D	0.005	0.001	THIACLOPRID	0.100	N/D	0.001	0.001
					THIAMETHOXAM	5.000	N/D	0.001	0.001
					TRIFLOXYSTROBIN	0.100	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



4001 SW 47th Avenue Suite 208 Davie, FL 33314 1-833-TEST-CBD info@greenscientificlabs.com











Order #: 40909 Order Name: BSO2.110419 Batch#: BSO2.110419 Received: 11/06/2019 Completed: 11/08/2019



RESIDUAL SOLVENTS:

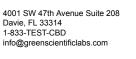
Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405

Prepared: 11/06/2019 15:09:21 **Uploaded:** 11/08/2019 07:09:26

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	N/D	140	20
ETHYL ACETATE	5,000	N/D	140	20
THYL ETHER	5,000	N/D	140	20
SOPROPYL 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
RICHLOROETHENE	1	N/D	0	0
YLENES	2,170	N/D	130	20















Order #: 40909 Order Name: BSO2.110419 Batch#: BSO2.110419 Received: 11/06/2019 Completed: 11/08/2019



Heavy Metals Analysis:

ICP-MS - Shimadzu ICPMS-2030

GSL SOP 403

Uploaded: 11/07/2019 08:25:31

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











