

Order #: 53248 Order Name: Koi Naturals Orange 1000mg Batch#: 1369BB0422 Received: 04/30/2020 Completed: 05/06/2020



Koi CBD LLC 14631 Best Ave Norwalk California, 90650 (877) 774-4779 morgan@koicbd.com



#### Sample



N/D D9-THC 3.746% Total CBD

1,156.4 mg Cannabinoids per unit 1,061.9 mg CBD per unit

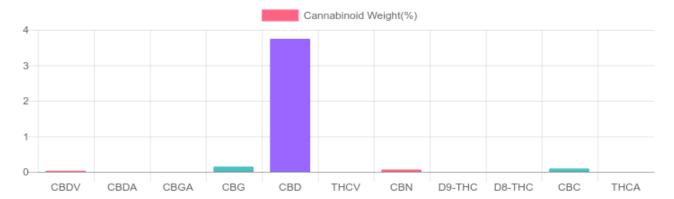
1 unit = 30 ml per unit x density (.945) x Cannabinoid concentration

#### **Cannabinoids Test**

SHIMADZU INTEGRATED UPLC-PDA

GSL SOP 400 **PREPARED:** 05/01/2020 16:07:52

Cannabinoids	LOQ	weight(%)	mg/g	mg/unit
D9-THC	10 PPM	N/D	N/D	N/D
THCA	10 PPM	N/D	N/D	N/D
CBD	10 PPM	3.746%	37.456	1,061.9
CBDA	20 PPM	N/D	N/D	N/D
CBDV	20 PPM	0.031%	0.310	8.8
CBC	10 PPM	0.092%	0.915	25.9
CBN	10 PPM	0.065%	0.653	18.5
CBG	10 PPM	0.146%	1.457	41.3
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*		3.746%	37.456	1,061.9
TOTAL CANNABINOIDS		4.080%	40.791	1,156.4



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

BUL

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



Order #: 53248 Order Name: Koi Naturals Orange 1000mg Batch#: 1369BB0422 Received: 04/30/2020 Completed: 05/06/2020



GSL SOP 404

Koi CBD LLC 14631 Best Ave Norwalk California, 90650 (877) 774-4779 morgan@koicbd.com



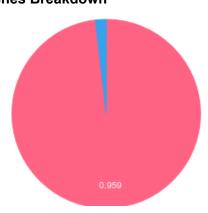
**TERPENES: TOTAL (0.977%)** 

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

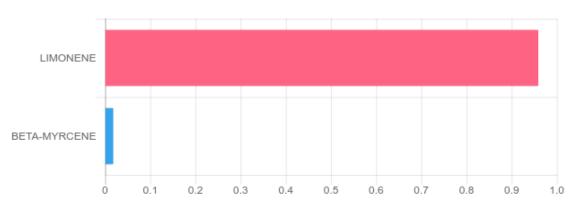
Terpene	Results (%)	LOQ (%)	LOD (%)
BETA-MYRCENE	0.018%	0.0067%	0.0063%
LIMONENE	0.959%	0.0067%	0.0063%

### Terpenes Breakdown

Prepared: 05/04/2020 17:02:30



### **Top Terpenes Results:**



#### Tested for but not present:

ALPHA-PINENE, CAMPHENE, BETA-PINENE, 3-CARENE, ALPHA-TERPINENE, TRANS-BETA-OCIMENE, P-CYMENE, CIS-BETA-OCIMENE, EUCALYPTOL, GAMMA.-TERPINENE, TERPINOLENE, LINALOOL, ISOPULEGOL, GERANIOL, CARYOPHYLLENE, HUMULENE, CIS-NEROLIDOL, TRANS-NEROLIDOL, GUAIOL, CARYOPHYLLENE OXIDE, ALPHA-BISABOLOL

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 #: 53248 Order Name: Koi Naturals Orange 1000mg Batch#: 1369BB0422 Received: 04/30/2020 Completed: 05/06/2020



Koi CBD LLC 14631 Best Ave Norwalk California, 90650 (877) 774-4779 morgan@koicbd.com



### **PESTICIDE ANALYSIS:**

GSL SOP 401 **PREPARED:** 05/01/2020 19:02:37

GCMS-MS - Shimadzu GCMS-TQ8040

Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
0.700	N/D	0.003	0.001
0.100	N/D	0.003	0.001
0.100	N/D	0.003	0.001
0.100	N/D	0.003	0.001
	( <b>ppm</b> ) 0.700 0.100 0.100	(ppm)         (ppm)           0.700         N/D           0.100         N/D           0.100         N/D	(ppm)         (ppm)         (ppm)           0.700         N/D         0.003           0.100         N/D         0.003           0.100         N/D         0.003

Pesticide		Action Level	Results	LOQ	LOD
	resticide	(ppm)	(ppm)	(ppm)	(ppm)
	CYFLUTHRIN	2.000	N/D	0.003	0.001
	CYPERMETHRIN	1.000	N/D	0.003	0.001
	PARATHION-METHYL	0.100	N/D	0.003	0.001
	PENTACHLORONITROBENZENE	E 0.100	N/D	0.003	0.001

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
DIAZINON	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)	0.300	N/D	0.003	0.003
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
FIPRONIL	0.100	N/D	0.003	0.001	SPIROXAMINE	0.100	N/D	0.001	0.001
FLONICAMID	0.100	N/D	0.025	0.010	TEBUCONAZOLE	0.100	N/D	0.005	0.001
FLUDIOXONIL	0.100	N/D	0.003	0.001	THIACLOPRID	0.100	N/D	0.001	0.001
HEXYTHIAZOX	0.100	N/D	0.005	0.001	THIAMETHOXAM	5.000	N/D	0.001	0.001
IMAZALIL	0.100	N/D	0.005	0.001	TRIFLOXYSTROBIN	0.100	N/D	0.001	0.001

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

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

Ben Witten, MS, MT., Lab Director

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







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 #: 53248 Order Name: Koi Naturals Orange 1000mg Batch#: 1369BB0422 Received: 04/30/2020 Completed: 05/06/2020



Koi CBD LLC 14631 Best Ave Norwalk California, 90650 (877) 774-4779 morgan@koicbd.com



### **RESIDUAL SOLVENTS:**

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405

Residual Solvent	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
1,1-DICHLOROETHENE	8	N/D	0.63	0.63
1,2- DICHLOROETHANE	2	N/D	0.12	0.02
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
CIS 1,2-DICHLOROETHENE	5	N/D	0.73	0.18
ETHANOL	5,000	N/D	140	20
ETHYL ACETATE	5,000	N/D	140	20
ETHYL ETHER	5,000	N/D	140	20
ETHYLENE OXIDE	1	N/D	0	0
ISOPROPYL ALCOHOL	5,000	N/D	140	20
METHANOL	3,000	N/D	100	20
METHYLENE CHLORIDE	125	N/D	0.15	0.15
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
TRANS 1,2-DICHLOROETHENE	5	N/D	0.73	0.18
TRICHLOROETHENE	1	N/D	1	0.5
XYLENES	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 #: 53248 Order Name: Koi Naturals Orange 1000mg Batch#: 1369BB0422 Received: 04/30/2020 Completed: 05/06/2020



Koi CBD LLC 14631 Best Ave Norwalk California, 90650 (877) 774-4779 morgan@koicbd.com



### **Microbial Analysis:**

Microbial Analysis GSL SOP 406

Uploaded: 05/06/2020 10:37:52

PCR - Agilent AriaMX <b>Test</b>	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

<sup>†</sup> 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







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.

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

<sup>\*\*\*</sup> Flavus = 2 Copies of DNA / Furnigatis = 2 Copies of DNA Niger = 20 Copies of DNA / Terrus = 10 copies of DNA



Order #: 53248 Order Name: Koi Naturals Orange 1000mg Batch#: 1369BB0422 Received: 04/30/2020 Completed: 05/06/2020



**Koi CBD LLC** 14631 Best Ave Norwalk California, 90650 (877) 774-4779 morgan@koicbd.com



### **Mycotoxin Analysis:**

LC-MS - Shimadzu LCMS-8060 GSL SOP 401

Uploaded: 05/04/2020 12:02:52

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

LOQ is 4ppb, LOD is 1ppb

### **Heavy Metals Analysis:**

ICP-MS - Shimadzu ICPMS-2030

GSL SOP 403

Uploaded: 05/04/2020 17:27:28

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: 05/05/2020 16:07:59

Water

0.55

### Filth and Foreign Materials Analysis:

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

Uploaded: 05/05/2020 16:18:32

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







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.