

BELCOSTA LABS // 1131 E. SOUTH STREET LONG BEACH CA 90805 // PH: (562) 676-4206

CA LICENSE #: C8-0000008-LIC

#### **CERTIFICATE OF ANALYSIS**

PRODUCED: NOV 08, 2019

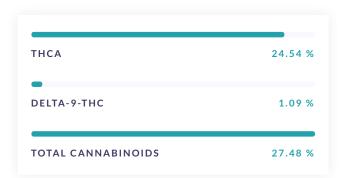
2019-10-15\_ORCH\_FL (FLOWER) // CLIENT: WALNUT LLC

**BATCH RESULT: PASS** 



BATCH NO.: 2019-10-15\_ORCH\_FL

MATRIX: FLOWER
CATEGORY: INHALABLE
SAMPLE ID: BCL-191106-001
COLLECTED ON: NOV 06, 2019
RECEIVED ON: NOV 06, 2019
BATCH SIZE: 8133 GRAMS
SAMPLE SIZE: 31 GRAMS









PASS



PASS











CANNABINOIDS

PASS PASS

#### **CULTIVATOR**

WALNUT LLC 3030 WALNUT STE 160 LONG BEACH, CA 90807

LICENSE CCI 19-0000600

TYPE
MEDICINAL - CULTIVATOR LICENSE

#### **DISTRIBUTOR**

WALNUT LLC 3030 WALNUT STE 160 LONG BEACH, CA 90807

LICENSE C11-0001016-LIC

ADULT-USE AND MEDICINAL -DISTRIBUTOR LICENSE



ALL LQC SAMPLES REQUIRED BY SECTION 5730 OF CALIFORNIA CODE OF REGULATIONS TITLE 16 DIVISION 42
BUREAU OF CANNABIS CONTROL WERE PERFORMED AND MET THE ACCEPTANCE CRITERIA.

RESULTS CERTIFIED BY: RON BROOKS, M.S.

SCIENTIFIC DIRECTOR, BELCOSTA LABS

NOV 08, 2019

# BCL-03: CANNABINOID POTENCY BY HPLC-UV NOV 08, 2019

DRY-WEIGHT AMOUNTS SHOWN



ANALYTE	LABELED AMOUNT	DETECTED	DETECTED	LOD	LOQ	PASS/FAIL
CBC		ND	ND	0.025 mg/g	0.1 mg/g	N/A
CBCA		0.84176 %	8.4176 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBD		ND	ND	0.025 mg/g	0.1 mg/g	N/A
CBDA		0.06332 %	0.6332 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBDV		ND	ND	0.025 mg/g	0.1 mg/g	N/A
CBDVA		ND	ND	0.025 mg/g	0.1 mg/g	N/A
CBG		0.07539 %	0.7539 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBGA		0.74568 %	7.4568 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBN		ND	ND	0.025 mg/g	0.1 mg/g	N/A
Δ <sup>8</sup> -ΤΗC		ND	ND	0.025 mg/g	0.1 mg/g	N/A
Δ <sup>9</sup> -ΤΗC		1.09449 %	10.9449 mg/g	0.025 mg/g	0.1 mg/g	N/A
THCA		24.5415 %	245.415 mg/g	0.025 mg/g	0.1 mg/g	N/A
тнсv		ND	ND	0.025 mg/g	0.1 mg/g	N/A
THCVA		0.11577 %	1.1577 mg/g	0.025 mg/g	0.1 mg/g	N/A
TOTAL THC (TOTAL THC = (THCA X 0.877)	+ THC)	22.61738 %	226.1738 mg/g			N/A
TOTAL CBD (TOTAL CBD = (CBDA X 0.877)	+ CBD)	0.05553 %	0.5553 mg/g			N/A



# BCL-09: TERPENOID TESTING BY HS-GC/FID NOV 07, 2019

ANALYTE	LABELED AMOUNT	DETECTED	DETECTED	PASS/FAIL
TOTAL TERPENES		3.97565 %	39.7565 mg/g	N/A
D-LIMONENE		1.23006 %	12.3006 mg/g	N/A
β-CARYOPHYLLENE		1.10604 %	11.0604 mg/g	N/A
α-H U M U L E N E		0.35246 %	3.5246 mg/g	N/A
LINALOOL		0.2767 %	2.767 mg/g	N/A
β-MYRCENE		0.24196 %	2.4196 mg/g	N/A
α-PINENE		0.22886 %	2.2886 mg/g	N/A
β-PINENE		0.21275 %	2.1275 mg/g	N/A
α-BISABOLOL		0.17217 %	1.7217 mg/g	N/A
β-OCIMENE		0.15465 %	1.5465 mg/g	N/A
P-CYMENE		ND	ND	N/A
y-TERPINENE		ND	ND	N/A
CIS-NEROLIDOL		ND	ND	N/A
1,8-CINEOLE		N D	ND	N/A
α-TERPINENE		ND	ND	N/A
CAMPHENE		ND	ND	N/A
α- O C I M E N E		ND	ND	N/A
TERPINOLENE		ND	ND	N/A



ISOPULEGOL	ND	N D	N/A
GUAIOL	ND	ND	N/A
GERANIOL	ND	ND	N/A
Δ <sup>3</sup> -CARENE	ND	ND	N/A
TRANS-NEROLIDOL	ND	N D	N/A

## BCL-02: MOISTURE CONTENT BY GRAVIMETRY NOV 06, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
MOISTURE		8.5 %	N/A

#### BCL-06: MICROBIOLOGICAL ANALYSIS BY QPCR NOV 08, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
ASPERGILLUS FLAVUS	Any amount in 1 gram	ND	PASS
ASPERGILLUS FUMIGATUS	Any amount in 1 gram	ND	PASS
ASPERGILLUS NIGER	Any amount in 1 gram	ND	PASS
ASPERGILLUS TERREUS	Any amount in 1 gram	ND	PASS
ESCHERICHIA COLI	Any amount in 1 gram	ND	PASS
SALMONELLA SPP.	Any amount in 1 gram	ND	PASS



#### BCL-11: MYCOTOXIN TESTING BY LC-MS/MS NOV 08, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
AFLATOXIN B1	20 μg/kg	ND	15 μg/kg	20 μg/kg	PASS
AFLATOXIN B2	20 μg/kg	ND	15 μg/kg	20 μg/kg	PASS
AFLATOXIN G1	20 μg/kg	ND	15 μg/kg	20 μg/kg	PASS
AFLATOXIN G2	20 μg/kg	ND	15 μg/kg	20 μg/kg	PASS
AFLATOXINS	20 μg/kg	ND	15 μg/kg	20 μg/kg	PASS
OCHRATOXIN A	20 μg/kg	ND	15 μg/kg	20 μg/kg	PASS

BCL-05: RESIDUAL PESTICIDE ANALYSIS BY LC-MS/MS ESI NOV 08, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL	ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
ABAMECTIN	0.1 μg/g	ND	0.03 μg/g	0.05 μg/g	PASS	IMIDACLOPRID	5 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS
ACEPHATE	0.1 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS	KRESOXIM- METHYL	0.1 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS
ACEQUINOCYL	0.1 μg/g	ND	0.03 µg/g	0.05 µg/g	PASS	MALATHION	0.5 μg/g	ND	0.03 µg/g	0.05 µg/g	PASS
ACETAMIPRID	0.1 μg/g	ND	0.03 µg/g	0.05 µg/g	PASS	METALAXYL	2 μg/g	ND	0.03 µg/g	0.05 µg/g	PASS
ALDICARB	Any amount	ND	0.03 μg/g	0.05 μg/g	PASS	METHIOCARB	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS
AZOXYSTROBIN	0.1 μg/g	ND	0.03 μg/g	0.05 μg/g	PASS	METHOMYL	1 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS
BIFENAZATE	0.1 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS	MEVINPHOS	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS



BIFENTHRIN	3 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS	MYCLOBUTANIL	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS
BOSCALID	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS	NALED	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS
CARBARYL	0.5 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS	OXAMYL	0.5 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS
CARBOFURAN	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS	PACLOBUTRAZOL	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS
CHLORANTRANIL- IPROLE	10 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS	PERMETHRIN	0.5 µg/g	ND	0.03 μg/g	0.05 μg/g	PASS
CLOFENTEZINE	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS	PHOSMET	0.1 µg/g	ND	0.03 μg/g	0.05 μg/g	PASS
COUMAPHOS	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS	PIPERONYLBUTO- XIDE	3 µg/g	ND	0.03 μg/g	0.05 μg/g	PASS
DAMINOZIDE	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS	PRALLETHRIN	0.1 µg/g	ND	0.03 μg/g	0.05 μg/g	PASS
DIAZINON	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS	PROPICONAZOLE	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS
DIMETHOATE	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS	PROPOXUR	Any amount	ND	0.03 μg/g	0.05 μg/g	PASS
DIMETHOMORPH	2 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS	PYRETHRINS	0.5 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS
ETHOPROPHOS	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS	PYRIDABEN	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS
ETOFENPROX	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS	SPINETORAM	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS
ETOXAZOLE	0.1 µg/g	ND	0.03 µg/g		PASS	SPINOSAD	0.1 µg/g	ND	0.03 µg/g		PASS
FENHEXAMID	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS	SPIROMESIFEN	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS
FENOXYCARB	Any amount	ND		0.05 μg/g	PASS	SPIROTETRAMAT	0.1 µg/g	ND		0.05 μg/g	PASS
FENPYROXIMATE	0.1 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS	SPIROXAMINE	Any amount	ND		0.05 μg/g	PASS
FIPRONIL	Any amount	ND	0.03 µg/g		PASS	TEBUCONAZOLE	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS
FLONICAMID	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS	THIACLOPRID	Any amount	ND	0.03 µg/g		PASS
FLUDIOXONIL	0.1 µg/g	ND		0.05 μg/g	PASS	THIAMETHOXAM	5 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS
HEXYTHIAZOX	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS	TRIFLOXYSTROB- IN	0.1 µg/g	ND	0.03 µg/g	0.05 μg/g	PASS



IMAZALIL

Any amount

ND 0.03 0.05

PASS

## BCL-13: PESTICIDE TESTING BY GC/MS NOV 08, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
CAPTAN	0.7 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS
CHLORDANE	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS
CHLORFENAPYR	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS
CHLORPYRIFOS	Any amount	ND	0.03 µg/g	0.05 μg/g	PASS
CYFLUTHRIN	2 μg/g	ND	0.03 µg/g	0.05 µg/g	PASS

ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
1 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS
Any amount	ND	0.03 µg/g	0.05 μg/g	PASS
Any amount	ND	0.03 µg/g	0.05 μg/g	PASS
0.1 μg/g	ND	0.03 µg/g	0.05 μg/g	PASS
	1 μg/g Any amount Any amount	Any amount ND Any amount ND	1 μg/g ND 0.03 μg/g  Any amount ND 0.03 μg/g  Any amount ND 0.03 μg/g  O.1 μg/g ND 0.03	1 μg/g ND 0.03 0.05 μg/g μg/g  Any amount ND 0.03 0.05 μg/g μg/g  Any amount ND 0.03 0.05 μg/g μg/g  O.1 μg/g ND 0.03 0.05

## BCL-10: HEAVY METAL TESTING BY ICP-MS NOV 07, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
ARSENIC	0.2 μg/g	< LOQ	0.004 µg/g	0.02 μg/g	PASS
CADMIUM	0.2 μg/g	ND	0.004 µg/g	0.02 μg/g	PASS
LEAD	0.5 μg/g	< LOQ	0.004 µg/g	0.02 μg/g	PASS
MERCURY	0.1 μg/g	0.004 µg/g	0.001 µg/g	0.004 μg/g	PASS



## BCL-12: WATER ACTIVITY BY HUMIDITY EQUILIBRIUM NOV 07, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
WATER ACTIVITY	0.65 Aw	0.58 AW	PASS

# BCL-07: FOREIGN MATERIAL TESTING BY MICROSCOPY NOV 06, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
CINDERS	25 %	ND	PASS
DIRT	25 %	ND	PASS
IMBEDDED FOREIGN MATERIAL	25 %	ND	PASS
INSECT FRAGMENTS	1 Unit	ND	PASS
MAMMAL EXCREMENT	1 Unit	ND	PASS
MOLD	25 %	ND	PASS
RODENT HAIR	1 Unit	ND	PASS
SAND	25 %	ND	PASS
SOIL	25 %	ND	PASS

