

# CERTIFICATE OF ANALYSIS

PRODUCED: NOV 25, 2019

2019\_11\_4\_ORCH\_FL (FLOWER) // CLIENT: WALNUT LLC

BATCH RESULT: **PASS**

**BATCH NO.:** 2019\_11\_4\_ORCH\_FL  
**MATRIX:** FLOWER  
**CATEGORY:** INHALABLE  
**SAMPLE ID:** BCL-191122-001  
**COLLECTED ON:** NOV 22, 2019  
**RECEIVED ON:** NOV 22, 2019  
**BATCH SIZE:** 2981 GRAMS  
**SAMPLE SIZE:** 12 GRAMS

THCA 20.96 %

CBGA 0.74 %

TOTAL CANNABINOIDS 23.19 %



MOISTURE



MICROBIAL  
PASS



MYCOTOXINS  
PASS



PESTICIDES  
PASS



TERPENOIDS



CANNABINOIDS



HEAVY METALS  
PASS



WATER ACTIVITY  
PASS



FOREIGN  
MATERIALS  
PASS

## CULTIVATOR

WALNUT LLC  
 3030 WALNUT STE 160  
 LONG BEACH, CA 90807

**LICENSE**  
 CCL19-0000600

**TYPE**  
 MEDICINAL - CULTIVATOR LICENSE

## DISTRIBUTOR

WALNUT LLC  
 3030 WALNUT STE 160  
 LONG BEACH, CA 90807

**LICENSE**  
 C11-0001016-LIC

**TYPE**  
 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 25, 2019




## BCL-03: CANNABINOID POTENCY BY HPLC-UV

NOV 25, 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		0.58269 %	5.8269 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
CBD A		0.05428 %	0.5428 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		0.06734 %	0.6734 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBGA		0.74392 %	7.4392 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
$\Delta^8$ -THC		ND	ND	0.025 mg/g	0.1 mg/g	N/A
$\Delta^9$ -THC		0.68217 %	6.8217 mg/g	0.025 mg/g	0.1 mg/g	N/A
THCA		20.96434 %	209.6434 mg/g	0.025 mg/g	0.1 mg/g	N/A
THCV		ND	ND	0.025 mg/g	0.1 mg/g	N/A
THCVA		0.09231 %	0.9231 mg/g	0.025 mg/g	0.1 mg/g	N/A
<b>TOTAL THC</b> (TOTAL THC = (THCA X 0.877) + THC)		19.0679 %	190.679 mg/g			N/A
<b>TOTAL CBD</b> (TOTAL CBD = (CBDA X 0.877) + CBD)		0.04761 %	0.4761 mg/g			N/A



## BCL-09: TERPENOID TESTING BY HS-GC/FID

NOV 24, 2019

ANALYTE	LABELED AMOUNT	DETECTED	DETECTED	PASS/FAIL
TOTAL TERPENES		1.81988 %	18.1988 mg/g	N/A
$\beta$ -CARYOPHYLLENE		0.62402 %	6.2402 mg/g	N/A
D-LIMONENE		0.39816 %	3.9816 mg/g	N/A
$\alpha$ -HUMULENE		0.22405 %	2.2405 mg/g	N/A
LINALOOL		0.14293 %	1.4293 mg/g	N/A
$\beta$ -PINENE		0.11044 %	1.1044 mg/g	N/A
$\alpha$ -BISABOLOL		0.10699 %	1.0699 mg/g	N/A
$\alpha$ -PINENE		0.09624 %	0.9624 mg/g	N/A
$\beta$ -MYRCENE		0.09271 %	0.9271 mg/g	N/A
CAMPHENE		0.02434 %	0.2434 mg/g	N/A
CARYOPHYLLENE OXIDE		ND	ND	N/A
CIS-NEROLIDOL		ND	ND	N/A
$\alpha$ -TERPINENE		ND	ND	N/A
$\Delta^3$ -CARENE		ND	ND	N/A
$\gamma$ -TERPINENE		ND	ND	N/A
GERANIOL		ND	ND	N/A
GUAJOL		ND	ND	N/A
ISOPULEGOL		ND	ND	N/A



P-CYMENE	ND	ND	N/A
TERPINOLENE	ND	ND	N/A
TRANS-NEROLIDOL	ND	ND	N/A

## BCL-02: MOISTURE CONTENT BY GRAVIMETRY

NOV 22, 2019



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

## BCL-06: MICROBIOLOGICAL ANALYSIS BY QPCR

NOV 24, 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 24, 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-13: PESTICIDE TESTING BY GC/MS

NOV 24, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL	ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
CAPTAN	0.7 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS	CYPERMETHRIN	1 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	DICHLORVOS	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	METHYL PARATHION	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	PENTACHLORONI-TROBENZENE	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
CYFLUTHRIN	2 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS						



## BCL-05: RESIDUAL PESTICIDE ANALYSIS BY LC-MS/MS ESI

NOV 24, 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



# REGULATORY COMPLIANCE TESTING

<b>ETHOPROPHOS</b>	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
<b>ETOFENPROX</b>	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
<b>ETOXAZOLE</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>FENHEXAMID</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>FENOXYCARB</b>	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
<b>FENPYROXIMATE</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>FIPRONIL</b>	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
<b>FLONICAMID</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>FLUDIOXONIL</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>HEXYTHIAZOX</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>IMAZALIL</b>	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS

<b>PYRIDABEN</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>SPINETORAM</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>SPINOSAD</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>SPIROMESIFEN</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>SPIROTETRAMAT</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>SPIROXAMINE</b>	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
<b>TEBUCONAZOLE</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>THIACLOPRID</b>	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
<b>THIAMETHOXAM</b>	5 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
<b>TRIFLOXYSTROB-IN</b>	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS

## BCL-10: HEAVY METAL TESTING BY ICP-MS

NOV 25, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
<b>ARSENIC</b>	0.2 µg/g	ND	0.004 µg/g	0.02 µg/g	PASS
<b>CADMIUM</b>	0.2 µg/g	ND	0.004 µg/g	0.02 µg/g	PASS
<b>LEAD</b>	0.5 µg/g	ND	0.004 µg/g	0.02 µg/g	PASS
<b>MERCURY</b>	0.1 µg/g	0.01 µg/g	0.001 µg/g	0.004 µg/g	PASS



## BCL-12: WATER ACTIVITY BY HUMIDITY EQUILIBRIUM

NOV 22, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
WATER ACTIVITY	0.65 Aw	0.52 Aw	PASS

## BCL-07: FOREIGN MATERIAL TESTING BY MICROSCOPY

NOV 22, 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

