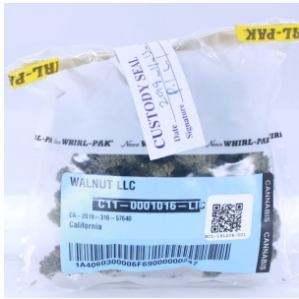


# CERTIFICATE OF ANALYSIS

PRODUCED: DEC 10, 2019

2019\_11\_13\_ORCH\_FL (FLOWER) // CLIENT: WALNUT LLC

BATCH RESULT: **PASS**

**BATCH NO.:** 2019\_11\_13\_ORCH\_FL  
**MATRIX:** FLOWER  
**CATEGORY:** INHALABLE  
**SAMPLE ID:** BCL-191206-001  
**COLLECTED ON:** DEC 06, 2019  
**RECEIVED ON:** DEC 06, 2019  
**BATCH SIZE:** 9866 GRAMS  
**SAMPLE SIZE:** 36 GRAMS

**THCA** 22.18 %

**DELTA-9-THC** 1.1 %

**TOTAL CANNABINOIDS** 24.91 %

**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

DEC 10, 2019




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

DEC 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		0.48455 %	4.8455 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		0.05742 %	0.5742 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		0.06151 %	0.6151 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBGA		0.90934 %	9.0934 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		1.10071 %	11.0071 mg/g	0.025 mg/g	0.1 mg/g	N/A
THCA		22.18052 %	221.8052 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		0.11324 %	1.1324 mg/g	0.025 mg/g	0.1 mg/g	N/A
<b>TOTAL THC</b> (TOTAL THC = (THCA X 0.877) + THC)		20.55302 %	205.5302 mg/g			N/A
<b>TOTAL CBD</b> (TOTAL CBD = (CBDA X 0.877) + CBD)		0.05035 %	0.5035 mg/g			N/A



BCL-09: TERPENOID TESTING BY HS-GC/FID  
 DEC 09, 2019

ANALYTE	LABELED AMOUNT	DETECTED	DETECTED	PASS/FAIL
TOTAL TERPENES		2.52976 %	25.2976 mg/g	N/A
β-CARYOPHYLLENE		0.68112 %	6.8112 mg/g	N/A
D-LIMONENE		0.52949 %	5.2949 mg/g	N/A
TRANS-NEROLIDOL		0.48829 %	4.8829 mg/g	N/A
α-HUMULENE		0.23837 %	2.3837 mg/g	N/A
LINALOOL		0.14605 %	1.4605 mg/g	N/A
β-PINENE		0.11282 %	1.1282 mg/g	N/A
β-MYRCENE		0.10022 %	1.0022 mg/g	N/A
α-PINENE		0.09852 %	0.9852 mg/g	N/A
α-BISABOOL		0.07724 %	0.7724 mg/g	N/A
CAMPHENE		0.02372 %	0.2372 mg/g	N/A
CARYOPHYLLENE OXIDE		0.01759 %	0.1759 mg/g	N/A
TERPINOLENE		0.01633 %	0.1633 mg/g	N/A
ISOPULEGOL		ND	ND	N/A
P-CYMENE		ND	ND	N/A
α-TERPINENE		ND	ND	N/A
GUAJOL		ND	ND	N/A
GERANIOL		ND	ND	N/A



<b>γ-TERPINENE</b>	ND	ND	N/A
<b>CIS-NEROLIDOL</b>	ND	ND	N/A
<b>Δ<sup>3</sup>-CARENE</b>	ND	ND	N/A

## BCL-02: MOISTURE CONTENT BY GRAVIMETRY

DEC 08, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
<b>MOISTURE</b>		7.9 %	N/A

## BCL-06: MICROBIOLOGICAL ANALYSIS BY QPCR

DEC 09, 2019



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



## BCL-11: MYCOTOXIN TESTING BY LC-MS/MS

DEC 09, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
AFLATOXIN B1		ND	1.476 µg/kg	4.472 µg/kg	N/A
AFLATOXIN B2		ND	1.683 µg/kg	5.101 µg/kg	N/A
AFLATOXIN G1		ND	1.559 µg/kg	4.723 µg/kg	N/A
AFLATOXIN G2		ND	1.585 µg/kg	4.804 µg/kg	N/A
AFLATOXINS	20 µg/kg	ND	6.303 µg/kg	19.1 µg/kg	PASS
OCHRATOXIN A	20 µg/kg	ND	3.312 µg/kg	10.037 µg/kg	PASS

## BCL-13: PESTICIDE TESTING BY GC/MS

DEC 09, 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

DEC 09, 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



<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

DEC 10, 2019

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



## BCL-12: WATER ACTIVITY BY HUMIDITY EQUILIBRIUM

DEC 08, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
WATER ACTIVITY	0.65 Aw	0.61 Aw	PASS

## BCL-07: FOREIGN MATERIAL TESTING BY MICROSCOPY

DEC 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

