

# CERTIFICATE OF ANALYSIS

PRODUCED: OCT 21, 2019

2019\_09\_21\_GEL33\_FL (FLOWER) // CLIENT: WALNUT LLC

BATCH RESULT: **PASS**

**BATCH NO.:** 2019\_09\_21\_GEL33\_FL  
**MATRIX:** FLOWER  
**CATEGORY:** INHALABLE  
**SAMPLE ID:** BCL-191018-004  
**COLLECTED ON:** OCT 18, 2019  
**RECEIVED ON:** OCT 18, 2019  
**BATCH SIZE:** 2830 GRAMS  
**SAMPLE SIZE:** 14 GRAMS

**THCA** 25.53 %

**DELTA-9-THC** 0.61 %

**TOTAL CANNABINOIDS** 27.04 %

**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**  
 PML19-0000600

**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

OCT 21, 2019




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

OCT 21, 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		0.20286 %	2.0286 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		0.06812 %	0.6812 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		0.1278 %	1.278 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBGA		0.3932 %	3.932 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		0.60532 %	6.0532 mg/g	0.025 mg/g	0.1 mg/g	N/A
THCA		25.52508 %	255.2508 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		0.11429 %	1.1429 mg/g	0.025 mg/g	0.1 mg/g	N/A
<b>TOTAL THC</b> (TOTAL THC = (THCA X 0.877) + THC)		22.99081 %	229.9081 mg/g			N/A
<b>TOTAL CBD</b> (TOTAL CBD = (CBDA X 0.877) + CBD)		0.05974 %	0.5974 mg/g			N/A



BCL-09: TERPENOID TESTING BY HS-GC/FID  
OCT 20, 2019

ANALYTE	LABELED AMOUNT	DETECTED	DETECTED	PASS/FAIL
TOTAL TERPENES		2.5082 %	25.082 mg/g	N/A
$\beta$ -CARYOPHYLLENE		0.58166 %	5.8166 mg/g	N/A
D-LIMONENE		0.57711 %	5.7711 mg/g	N/A
$\beta$ -PINENE		0.48366 %	4.8366 mg/g	N/A
LINALOOL		0.40951 %	4.0951 mg/g	N/A
$\beta$ -MYRCENE		0.18107 %	1.8107 mg/g	N/A
$\alpha$ -HUMULENE		0.17451 %	1.7451 mg/g	N/A
$\alpha$ -PINENE		0.10068 %	1.0068 mg/g	N/A
P-CYMENE		ND	ND	N/A
$\gamma$ -TERPINENE		ND	ND	N/A
CIS-NEROLIDOL		ND	ND	N/A
$\beta$ -OCIMENE		ND	ND	N/A
1,8-CINEOLE		ND	ND	N/A
$\alpha$ -TERPINENE		ND	ND	N/A
CAMPHERE		ND	ND	N/A
$\alpha$ -OCIMENE		ND	ND	N/A
$\alpha$ -BISABOLOL		ND	ND	N/A
TERPINOLENE		ND	ND	N/A



ISOPULEGOL	ND	ND	N/A
GUAJOL	ND	ND	N/A
GERANIOL	ND	ND	N/A
$\Delta^3$ -CARENE	ND	ND	N/A
TRANS-NEROLIDOL	ND	ND	N/A

## BCL-02: MOISTURE CONTENT BY GRAVIMETRY

OCT 20, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
MOISTURE		6.8 %	N/A

## BCL-06: MICROBIOLOGICAL ANALYSIS BY QPCR

OCT 20, 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

OCT 21, 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

OCT 21, 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

OCT 21, 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

OCT 20, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
<b>ARSENIC</b>	0.2 µg/g	ND	0.004 µg/g	0.011 µg/g	PASS
<b>CADMIUM</b>	0.2 µg/g	0.019 µg/g	0.004 µg/g	0.011 µg/g	PASS
<b>LEAD</b>	0.5 µg/g	0.021 µg/g	0.006 µg/g	0.019 µg/g	PASS
<b>MERCURY</b>	0.1 µg/g	ND	0.004 µg/g	0.013 µg/g	PASS



## BCL-12: WATER ACTIVITY BY HUMIDITY EQUILIBRIUM

OCT 20, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
WATER ACTIVITY	0.65 Aw	0.56 Aw	PASS

## BCL-07: FOREIGN MATERIAL TESTING BY MICROSCOPY

OCT 19, 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

