

CERTIFICATE OF ANALYSIS

PRODUCED: DEC 20, 2019

2019_11_20_ORG_FL (FLOWER) // CLIENT: WALNUT LLC

BATCH RESULT: **PASS**

BATCH NO.: 2019_11_20_ORG_FL
MATRIX: FLOWER
CATEGORY: INHALABLE
SAMPLE ID: BCL-191216-001
COLLECTED ON: DEC 16, 2019
RECEIVED ON: DEC 16, 2019
BATCH SIZE: 14718 GRAMS
SAMPLE SIZE: 54 GRAMS

THCA 28.96 %

DELTA-9-THC 1.2 %

TOTAL CANNABINOIDS 31.77 %

**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 20, 2019



BCL-03: CANNABINOID POTENCY BY HPLC-UV

DEC 19, 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		0.44557 %	4.4557 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		0.08682 %	0.8682 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		0.20971 %	2.0971 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBGA		0.77569 %	7.7569 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^8 -THC		ND	ND	0.025 mg/g	0.1 mg/g	N/A
Δ^9 -THC		1.2028 %	12.028 mg/g	0.025 mg/g	0.1 mg/g	N/A
THCA		28.95514 %	289.5514 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		0.09825 %	0.9825 mg/g	0.025 mg/g	0.1 mg/g	N/A
TOTAL THC (TOTAL THC = (THCA X 0.877) + THC)		26.59646 %	265.9646 mg/g			N/A
TOTAL CBD (TOTAL CBD = (CBDA X 0.877) + CBD)		0.07614 %	0.7614 mg/g			N/A



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

DEC 19, 2019

ANALYTE	LABELED AMOUNT	DETECTED	DETECTED	PASS/FAIL
TOTAL TERPENES		2.49608 %	24.9608 mg/g	N/A
D-LIMONENE		0.64534 %	6.4534 mg/g	N/A
β -PINENE		0.54854 %	5.4854 mg/g	N/A
β -CARYOPHYLLENE		0.50171 %	5.0171 mg/g	N/A
LINALOOL		0.30329 %	3.0329 mg/g	N/A
α -HUMULENE		0.19001 %	1.9001 mg/g	N/A
β -MYRCENE		0.09686 %	0.9686 mg/g	N/A
α -BISABOLOL		0.08901 %	0.8901 mg/g	N/A
α -PINENE		0.05095 %	0.5095 mg/g	N/A
TRANS-NEROLIDOL		0.03302 %	0.3302 mg/g	N/A
CARYOPHYLLENE OXIDE		0.02047 %	0.2047 mg/g	N/A
CAMPHENE		0.01688 %	0.1688 mg/g	N/A
CIS-NEROLIDOL		ND	ND	N/A
α -TERPINENE		ND	ND	N/A
Δ^3 -CARENE		ND	ND	N/A
γ -TERPINENE		ND	ND	N/A
GERANIOL		ND	ND	N/A
GUAJOL		ND	ND	N/A



ISOPULEGOL	ND	ND	N/A
P-CYMENTE	ND	ND	N/A
TERPINOLENE	ND	ND	N/A

BCL-02: MOISTURE CONTENT BY GRAVIMETRY

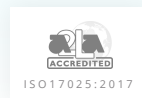
DEC 17, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
MOISTURE		6.3 %	N/A

BCL-06: MICROBIOLOGICAL ANALYSIS BY QPCR

DEC 18, 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

DEC 18, 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 18, 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 18, 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

ETHOPROPHOS	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
ETOFENPROX	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
ETOXAZOLE	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
FENHEXAMID	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
FENOXYCARB	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
FENPYROXIMATE	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
FIPRONIL	Any amount	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
FLUDIOXONIL	0.1 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
IMAZALIL	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
SPINETORAM	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
SPINOSAD	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
SPIROTETRAMAT	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
SPIROXAMINE	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
TEBUCONAZOLE	0.1 µg/g	ND	0.03 µg/g	0.05 µg/g	PASS
THIACLOPRID	Any amount	ND	0.03 µg/g	0.05 µg/g	PASS
THIAMETHOXAM	5 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

BCL-10: HEAVY METAL TESTING BY ICP-MS

DEC 18, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
ARSENIC	0.2 µg/g	< LOQ	0.0002 µg/g	0.04 µg/g	PASS
CADMIUM	0.2 µg/g	< LOQ	0.0001 µg/g	0.04 µg/g	PASS
LEAD	0.5 µg/g	< LOQ	0.0005 µg/g	0.05 µg/g	PASS
MERCURY	0.1 µg/g	< LOQ	0.0006 µg/g	0.04 µg/g	PASS



BCL-12: WATER ACTIVITY BY HUMIDITY EQUILIBRIUM

DEC 17, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
WATER ACTIVITY	0.65 Aw	0.44 Aw	PASS

BCL-07: FOREIGN MATERIAL TESTING BY MICROSCOPY

DEC 17, 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

