

CERTIFICATE OF ANALYSIS

PRODUCED: DEC 05, 2019

2019_11_12_ORG_FL (FLOWER) // CLIENT: WALNUT LLC

BATCH RESULT: **PASS**

BATCH NO.: 2019_11_12_ORG_FL
MATRIX: FLOWER
CATEGORY: INHALABLE
SAMPLE ID: BCL-191202-004
COLLECTED ON: DEC 02, 2019
RECEIVED ON: DEC 02, 2019
BATCH SIZE: 1885 GRAMS
SAMPLE SIZE: 12 GRAMS

THCA 32.51 %

CBGA 0.97 %

TOTAL CANNABINOIDS 35.3 %



MOISTURE

MICROBIAL
PASSMYCOTOXINS
PASSPESTICIDES
PASS

TERPENOIDS



CANNABINOIDS

HEAVY METALS
PASSWATER ACTIVITY
PASSFOREIGN 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 05, 2019




BCL-03: CANNABINOID POTENCY BY HPLC-UV

DEC 03, 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		0.47328 %	4.7328 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		0.09549 %	0.9549 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		0.19737 %	1.9737 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBGA		0.97072 %	9.7072 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		0.96915 %	9.6915 mg/g	0.025 mg/g	0.1 mg/g	N/A
THCA		32.50936 %	325.0936 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		0.08686 %	0.8686 mg/g	0.025 mg/g	0.1 mg/g	N/A
TOTAL THC (TOTAL THC = (THCA X 0.877) + THC)		29.47986 %	294.7986 mg/g			N/A
TOTAL CBD (TOTAL CBD = (CBDA X 0.877) + CBD)		0.08375 %	0.8375 mg/g			N/A



BCL-09: TERPENOID TESTING BY HS-GC/FID
DEC 05, 2019

ANALYTE	LABELED AMOUNT	DETECTED	DETECTED	PASS/FAIL
TOTAL TERPENES		2.36594 %	23.6594 mg/g	N/A
D-LIMONENE		0.50174 %	5.0174 mg/g	N/A
β -CARYOPHYLLENE		0.43866 %	4.3866 mg/g	N/A
TRANS-NEROLIDOL		0.35818 %	3.5818 mg/g	N/A
β -MYRCENE		0.34942 %	3.4942 mg/g	N/A
LINALOOL		0.30222 %	3.0222 mg/g	N/A
α -HUMULENE		0.17838 %	1.7838 mg/g	N/A
β -PINENE		0.09895 %	0.9895 mg/g	N/A
α -PINENE		0.05554 %	0.5554 mg/g	N/A
α -BISABOLOL		0.04236 %	0.4236 mg/g	N/A
CAMPHENE		0.02407 %	0.2407 mg/g	N/A
TERPINOLENE		0.01642 %	0.1642 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
γ -TERPINENE		ND	ND	N/A



CIS-NEROLIDOL	ND	ND	N/A
CARYOPHYLLENE OXIDE	ND	ND	N/A
Δ^3 -CARENE	ND	ND	N/A

BCL-02: MOISTURE CONTENT BY GRAVIMETRY

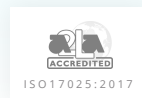
DEC 02, 2019



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

BCL-06: MICROBIOLOGICAL ANALYSIS BY QPCR

DEC 05, 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 04, 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

DEC 04, 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 04, 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 04, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
ARSENIC	0.2 µg/g	ND	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	ND	0.001 µg/g	0.004 µg/g	PASS



BCL-12: WATER ACTIVITY BY HUMIDITY EQUILIBRIUM

DEC 02, 2019



ANALYTE	ACTION LIMIT	DETECTED	PASS/FAIL
WATER ACTIVITY	0.65 Aw	0.53 Aw	PASS

BCL-07: FOREIGN MATERIAL TESTING BY MICROSCOPY

DEC 02, 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

