

CERTIFICATE OF ANALYSIS

PRODUCED: OCT 21, 2019

2019_09_21_COO_FL (FLOWER) // CLIENT: WALNUT LLC

BATCH RESULT: **PASS**

BATCH NO.: 2019_09_21_COO_FL
MATRIX: FLOWER
CATEGORY: INHALABLE
SAMPLE ID: BCL-191018-002
COLLECTED ON: OCT 18, 2019
RECEIVED ON: OCT 18, 2019
BATCH SIZE: 2802 GRAMS
SAMPLE SIZE: 14 GRAMS

THCA 23.08 %

CBGA 1.07 %

TOTAL CANNABINOIDS 25.39 %



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
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		0.03066 %	0.3066 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBCA		0.38272 %	3.8272 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
CBDA		0.06835 %	0.6835 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		0.08972 %	0.8972 mg/g	0.025 mg/g	0.1 mg/g	N/A
CBGA		1.07451 %	10.7451 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		0.5814 %	5.814 mg/g	0.025 mg/g	0.1 mg/g	N/A
THCA		23.08134 %	230.8134 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		0.08473 %	0.8473 mg/g	0.025 mg/g	0.1 mg/g	N/A
TOTAL THC (TOTAL THC = (THCA X 0.877) + THC)		20.82374 %	208.2374 mg/g			N/A
TOTAL CBD (TOTAL CBD = (CBDA X 0.877) + CBD)		0.05995 %	0.5995 mg/g			N/A



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

ANALYTE	LABELED AMOUNT	DETECTED	DETECTED	PASS/FAIL
TOTAL TERPENES		2.59741 %	25.9741 mg/g	N/A
β -CARYOPHYLLENE		1.16374 %	11.6374 mg/g	N/A
α -HUMULENE		0.39779 %	3.9779 mg/g	N/A
D-LIMONENE		0.39677 %	3.9677 mg/g	N/A
LINALOOL		0.23164 %	2.3164 mg/g	N/A
β -PINENE		0.22486 %	2.2486 mg/g	N/A
β -MYRCENE		0.08453 %	0.8453 mg/g	N/A
α -PINENE		0.05042 %	0.5042 mg/g	N/A
α -BISABOLOL		0.04766 %	0.4766 mg/g	N/A
P-CYMENE		ND	ND	N/A
γ -TERPINENE		ND	ND	N/A
CIS-NEROLIDOL		ND	ND	N/A
β -OCIMENE		ND	ND	N/A
1,8-CINEOLE		ND	ND	N/A
α -TERPINENE		ND	ND	N/A
CAMPHERE		ND	ND	N/A
α -OCIMENE		ND	ND	N/A
TERPINOLENE		ND	ND	N/A



ISOPULEGOL	ND	ND	N/A
GUAJOL	ND	ND	N/A
GERANIOL	ND	ND	N/A
Δ^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		7 %	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



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

OCT 20, 2019

ANALYTE	ACTION LIMIT	DETECTED	LOD	LOQ	PASS/FAIL
ARSENIC	0.2 µg/g	< LOQ	0.004 µg/g	0.011 µg/g	PASS
CADMIUM	0.2 µg/g	0.011 µg/g	0.004 µg/g	0.011 µg/g	PASS
LEAD	0.5 µg/g	0.019 µg/g	0.006 µg/g	0.019 µg/g	PASS
MERCURY	0.1 µg/g	< LOQ	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	0.53 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

