

# CERTIFICATE OF ANALYSIS

\* FOR QUALITY ASSURANCE PURPOSES. NOT A MICHIGAN COMPLIANCE CERTIFICATE.

PRODUCED: DEC 13, 2022

**SAMPLE:** CBN INFUSED FULL SPECTRUM CBD OIL BLEND (100053) (TINCTURE) // **CLIENT:** NUVITA CBD // **BATCH:** PASS  
 REFERENCE FINISHED PRODUCT LOTS 100054, 100055, 100056, 100057



**MATRIX:** TINCTURE  
**SAMPLE ID:** CAM-221208-078  
**COLLECTED ON:** DEC 07, 2022  
**RECEIVED ON:** DEC 07, 2022  
**SAMPLE SIZE:** 30 ML  
**SAMPLED BY:** KAITLYN  
**RECEIVED BY:** KAITLYN  
**SERVING/PACKAGE SIZE:** 0.94 G / 28.2 G

## CANNABINOID OVERVIEW

**CBD:** 26.4 mg/srv  
**CBN:** 8.38 mg/srv  
**TOTAL CANNABINOIDS:** 41.1 mg/srv

### BATCH RESULT: PASS

POTENCY	PASS	SOLVENTS	PASS
METALS	PASS	TERPENES	TESTED
MICROBIAL	PASS	WATER	PASS
PESTICIDES	PASS		

### POT-01: CANNABINOID POTENCY ANALYSIS BY HPLC-DAD // DEC 13, 2022

ANALYTE	LIMIT	AMT	AMT	LOD/LOQ (µg/g)	PASS/FAIL	ANALYTE	LIMIT	AMT	AMT	LOD/LOQ (µg/g)	PASS/FAIL
CBC		0.251 %	2.51 mg/g	0.0517/0.172	N/A	THCV		ND	ND	0.0699/0.233	N/A
CBD		2.81 %	28.1 mg/g	0.109/0.363	N/A	TOTAL THC **		0.139 %	1.39 mg/g		N/A
CBDA		0.192 %	1.92 mg/g	0.142/0.474	N/A	TOTAL CBD **		2.98 %	29.8 mg/g		N/A
CBDV		ND	ND	0.0673/0.224	N/A	CBD/SRV		26.4 mg			N/A
CBG		0.0639 %	0.639 mg/g	0.0576/0.192	N/A	Δ <sup>8</sup> + Δ <sup>9</sup> -THC/SRV		1.31 mg			PASS
CBGA		0.0223 %	0.223 mg/g	0.0328/0.109	N/A	Δ <sup>8</sup> -THC/SRV		ND			PASS
CBN		0.891 %	8.91 mg/g	0.0848/0.283	N/A	Δ <sup>9</sup> -THC/SRV		1.31 mg			N/A
Δ <sup>8</sup> + Δ <sup>9</sup> -THC		0.139 %	1.39 mg/g		N/A	CBD/PKG		792 mg			N/A
Δ <sup>8</sup> -THC	10 %	ND	ND	0.0578/0.193	PASS	Δ <sup>8</sup> + Δ <sup>9</sup> -THC/PKG		39.2 mg			PASS
Δ <sup>9</sup> -THC		0.139 %	1.39 mg/g	0.102/0.340	N/A	Δ <sup>8</sup> -THC/PKG		ND			PASS
THCA		ND	ND	0.0883/0.294	N/A	Δ <sup>9</sup> -THC/PKG		39.2 mg			N/A

\*\* TOTAL THC = DELTA-8-THC + DELTA-9-THC + (THCA X 0.877)

\*\* TOTAL CBD = CBD + (CBDA X 0.877)

### TRP-013: TERPENE ANALYSIS BY GC-MS // DEC 12, 2022

ANALYTE	AMT (%)	LOD/LOQ (µg/g)	PASS/FAIL	ANALYTE	AMT (%)	LOD/LOQ (µg/g)	PASS/FAIL
TOTAL TERPENES	0.132 %		N/A	CEDROL	ND	0.500/1.000	N/A
TRANS-CARYOPHYLLENE	0.056 %	0.500/1.000	N/A	CIS-β-OCIMENE	ND	0.500/1.000	N/A
α-BISABOLOL	0.022 %	0.500/1.000	N/A	CIS-NEROLIDOL	ND	0.500/1.000	N/A
α-HUMULENE	0.022 %	0.500/1.000	N/A	Δ <sup>3</sup> -CARENE	ND	0.500/1.000	N/A
β-MYRCENE	0.016 %	0.500/1.000	N/A	DL-MENTHOL	ND	0.500/1.000	N/A
GUAJOL	0.006 %	0.500/1.000	N/A	EUCALYPTOL	ND	0.500/1.000	N/A
α-TERPINEOL	0.005 %	0.500/1.000	N/A	γ-TERPINENE	ND	0.500/1.000	N/A
VALENCENE	0.005 %	0.500/1.000	N/A	GERANYL ACETATE	ND	0.500/1.000	N/A
(+)-FENCHONE	ND	0.500/1.000	N/A	ISOBORNEOL	ND	0.500/1.000	N/A
(1R)-ENDO-(+)-FENCHYL ALCOHOL	ND	0.500/1.000	N/A	ISOPULEGOL	ND	0.500/1.000	N/A
α-CEDRENE	ND	0.500/1.000	N/A	LIMONENE	ND	0.500/1.000	N/A
α-PHELLANDRENE	ND	0.500/1.000	N/A	LINALOOL	ND	0.500/1.000	N/A
α-PINENE	ND	0.500/1.000	N/A	PULEGONE	ND	0.500/1.000	N/A
α-TERPINENE	ND	0.500/1.000	N/A	SABINENE	ND	0.500/1.000	N/A
β-PINENE	ND	0.500/1.000	N/A	SABINENE HYDRATE	ND	0.500/1.000	N/A
BORNEOL	ND	0.500/1.000	N/A	TERPINOLENE	ND	0.500/1.000	N/A
CAMPHENE	ND	0.500/1.000	N/A	TRANS-β-OCIMENE	ND	0.500/1.000	N/A

CAMBIUM  
CARYOPHYLLENE OXIDE

ND 0.500/1.000  
ND 0.500/1.000

ND TRANS-NEROLIDOL  
N/A

ND 0.500/1.000

THIS REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT APPROVAL FROM CAMBIUM ANALYTICA. THE RESULTS HEREIN RELATE ONLY TO THE SAMPLE & BATCH IDENTIFIED IN THIS REPORT



**RESULTS CERTIFIED BY:** VERNON LALONE  
LABORATORY DIRECTOR, CAMBIUM ANALYTICA  
DEC 13, 2022

**RESULTS CERTIFIED BY:** DOUGLAS SMITH  
CHIEF SCIENTIST, CAMBIUM ANALYTICA  
DEC 13, 2022



PGC-03: CHEMICAL RESIDUE ANALYSIS BY GC-MS/MS // DEC 13, 2022

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/kg)	PASS/FAIL	ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/kg)	PASS/FAIL
CHLORFENAPYR	1 µg/g	ND	6.390/21.400	PASS	METHYL PARATHION	0.2 µg/g	ND	3.260/11.000	PASS

PLC-02: CHEMICAL RESIDUE ANALYSIS BY LC-MS/MS // DEC 12, 2022

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/kg)	PASS/FAIL	ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/kg)	PASS/FAIL
ABAMECTIN	0.5 µg/g	ND	73.400/244.000	PASS	IMAZALIL	0.2 µg/g	ND	16.500/54.800	PASS
ACEPHATE	0.4 µg/g	ND	17.300/57.600	PASS	IMIDACLOPRID	0.4 µg/g	ND	36.000/120.000	PASS
ACEQUINOCYL	2 µg/g	ND	29.900/99.700	PASS	KRESOXIM-METHYL	0.4 µg/g	ND	12.600/42.000	PASS
ACETAMIPRID	0.2 µg/g	ND	15.400/51.200	PASS	MALATHION	0.2 µg/g	ND	16.600/55.300	PASS
ALDICARB	0.4 µg/g	ND	45.000/150.000	PASS	METALAXYL	0.2 µg/g	ND	18.600/62.100	PASS
AZOXYSTROBIN	0.2 µg/g	ND	11.100/37.100	PASS	METHIOCARB	0.2 µg/g	ND	14.700/49.000	PASS
BIFENAZATE	0.2 µg/g	ND	26.600/88.700	PASS	METHOMYL	0.4 µg/g	ND	10.000/33.400	PASS
BIFENTHRIN	0.2 µg/g	ND	15.500/51.500	PASS	MGK-264	0.2 µg/g	ND	20.400/68.000	PASS
BOSCALID	0.4 µg/g	ND	13.600/44.300	PASS	MYCLOBUTANIL	0.2 µg/g	ND	20.900/69.800	PASS
CARBARYL	0.2 µg/g	ND	12.800/42.700	PASS	NALED	0.5 µg/g	ND	24.400/81.400	PASS
CARBOFURAN	0.2 µg/g	ND	11.300/37.800	PASS	OXAMYL	1 µg/g	ND	37.400/125.000	PASS
CHLORANTRANIL-IPROLE	0.2 µg/g	ND	26.100/87.000	PASS	PACLOBUTRAZOL	0.4 µg/g	ND	38.500/128.000	PASS
CHLORPYRIFOS	0.2 µg/g	ND	26.200/87.400	PASS	PERMETHRIN	0.2 µg/g	ND	40.100/134.000	PASS
CLOFENTEZINE	0.2 µg/g	ND	21.400/71.300	PASS	PHOSMET	0.2 µg/g	ND	25.400/84.700	PASS
CYFLUTHRIN	1 µg/g	ND	41.100/137.000	PASS	PRALLETHRIN	0.2 µg/g	ND	39.500/132.000	PASS
CYPERMETHRIN	1 µg/g	ND	29.400/98.100	PASS	PROPICONAZOLE	0.4 µg/g	ND	43.000/143.000	PASS
DAMINOZIDE	1 µg/g	ND	25.400/84.600	PASS	PROPOXUR	0.2 µg/g	ND	12.300/41.100	PASS
DIAZINON	0.2 µg/g	ND	19.800/65.900	PASS	PYRETHRINS	1 µg/g	ND	21.300/70.900	PASS
DICHLORVOS	1 µg/g	ND	13.300/44.500	PASS	PYRIDABEN	0.2 µg/g	ND	27.700/92.500	PASS
DIMETHOATE	0.2 µg/g	ND	13.000/43.400	PASS	SPINOSAD	0.2 µg/g	ND	6.260/20.900	PASS
ETHOPROPHOS	0.2 µg/g	ND	20.300/67.600	PASS	SPINOSAD A		ND	6.780/22.600	PASS
ETOFENPROX	0.4 µg/g	ND	15.300/50.900	PASS	SPINOSAD D		ND	2.560/8.500	PASS
ETOXAZOLE	0.2 µg/g	ND	14.400/47.900	PASS	SPIROMESIFEN	0.2 µg/g	ND	15.500/51.800	PASS
FENOXYCARB	0.2 µg/g	ND	21.200/70.800	PASS	SPIROTETRAMAT	0.2 µg/g	ND	37.700/126.000	PASS
FENPYROXIMATE	0.4 µg/g	ND	46.700/156.000	PASS	SPIROXAMINE	0.4 µg/g	ND	13.000/43.500	PASS
FIPRONIL	0.4 µg/g	ND	47.900/160.000	PASS	TEBUCONAZOLE	0.4 µg/g	ND	39.900/133.000	PASS
FLONICAMID	1 µg/g	ND	23.600/78.600	PASS	THIACLOPRID	0.2 µg/g	ND	16.400/54.800	PASS
FLUDIOXONIL	0.4 µg/g	ND	11.700/38.900	PASS	THIAMETHOXAM	0.2 µg/g	ND	14.600/48.500	PASS
HEXYTHIAZOX	1 µg/g	ND	30.000/99.900	PASS	TRIFLOXYSTROBIN	0.2 µg/g	ND	19.900/66.300	PASS





**TYM-028: TOTAL YEAST AND MOLD // DEC 12, 2022**

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
YEAST & MOLD	10000 CFU/g	ND	PASS

**COL-027: TOTAL COLIFORMS // DEC 12, 2022**

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
COLIFORMS	100 CFU/g	ND	PASS

**STEC-030: SHIGA TOXIN PRODUCING E. COLI // DEC 12, 2022**

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
SHIGA TOXIN-PRODUCING E. COLI	Any amount in 1 gram	ND	PASS

**SAL-030: SALMONELLA // DEC 12, 2022**

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
SALMONELLA SPP.	Any amount in 1 gram	ND	PASS

**ASP-029: ASPERGILLUS SPP. // DEC 12, 2022**

ANALYTE	LIMIT	AMT (CFU/g)	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

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
ASPERGILLUS SPP.	Any amount in 1 gram	ND	PASS
ASPERGILLUS TERREUS	Any amount in 1 gram	ND	PASS

**MET-05: HEAVY METALS ANALYSIS BY ICP-MS // DEC 09, 2022**

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/kg)	PASS/FAIL
ARSENIC	1.5 µg/g	ND	0.045/0.500	PASS
CADMIUM	0.5 µg/g	ND	0.026/0.500	PASS
CHROMIUM	2 µg/g	0.038 µg/g	0.027/0.500	PASS
COPPER		0.004 µg/g	0.045/0.500	N/A

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/kg)	PASS/FAIL
LEAD	0.5 µg/g	ND	0.017/0.500	PASS
MERCURY	3 µg/g	ND	0.004/0.050	PASS
NICKEL		0.013 µg/g	0.027/0.500	N/A

**: WATER ACTIVITY // DEC 09, 2022**

ANALYTE	LIMIT	AMT (Aw)	PASS/FAIL
WATER ACTIVITY	0.85 Aw	0.112 Aw	PASS

**SOL-04: RESIDUAL SOLVENT ANALYSIS BY GC-MS/HS // DEC 12, 2022**

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
1,2-DICHLOROETHANE	5 µg/g	ND	0.400/1.340	PASS
2,2-DIMETHYLBUTANE	290 µg/g	ND	0.980/3.270	PASS
2,3-DIMETHYLBUTANE	290 µg/g	ND	2.190/7.320	PASS
2-METHYLBUTANE	5000 µg/g	ND	1.540/5.140	PASS
2-METHYLPENTANE	290 µg/g	ND	0.730/2.440	PASS
3-METHYLPENTANE	290 µg/g	ND	0.730/2.440	PASS
ACETONE	5000 µg/g	ND	1.570/5.230	PASS
ACETONITRILE	410 µg/g	ND	1.850/6.170	PASS
BENZENE	2 µg/g	ND	0.180/0.590	PASS
BUTANE	5000 µg/g	ND	1.680/5.590	PASS
BUTANES ALL ISOMERS *	5000 µg/g	ND		PASS
CHLOROFORM	60 µg/g	ND	0.780/2.590	PASS
ETHANOL	5000 µg/g	ND	6.020/20.100	PASS
ETHYL ACETATE	5000 µg/g	ND	1.950/6.490	PASS
ETHYLENE OXIDE	50 µg/g	ND	0.150/0.490	PASS

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
ETHYL ETHER	5000 µg/g	ND	1.370/4.550	PASS
HEPTANE	5000 µg/g	ND	1.310/4.370	PASS
HEXANE	290 µg/g	ND	1.420/4.740	PASS
HEXANES ALL ISOMERS *	290 µg/g	ND		PASS
ISOBUTANE	5000 µg/g	ND	1.600/5.340	PASS
ISOPROPYL ALCOHOL	5000 µg/g	ND	4.900/16.300	PASS
METHANOL	3000 µg/g	ND	7.890/26.400	PASS
METHYLENE CHLORIDE	600 µg/g	ND	1.360/4.530	PASS
NEOPENTANE	5000 µg/g	ND	1.490/4.970	PASS
PENTANE	5000 µg/g	ND	1.460/4.870	PASS
PENTANES ALL ISOMERS *	5000 µg/g	ND		PASS
PROPANE	5000 µg/g	ND	1.950/6.510	PASS
TOLUENE	890 µg/g	ND	1.880/6.260	PASS
TRICHLOROETHYLENE	80 µg/g	ND	0.290/0.960	PASS
TOTAL XYLENES	2170 µg/g	ND	2.020/6.720	PASS

\* BEYOND SCOPE OF ACCREDITATION



ACCREDITATIONS



ILAC-MRA



ISO/IEC 17025

ILAC-MRA, PJLA ACCREDITED

PLC-02: CHEMICAL RESIDUE ANALYSIS BY LC-MS/MS
ABAMECTIN, ABAMECTIN BA, ABAMECTIN BB, ACEPHATE,
ACEQUINOCYL, ACETAMIPRID, ALDICARB, AZOXYSTROBIN,
BIFENAZATE, BIFENTHRIN, BOSCALID, CARBARYL,
CARBOFURAN, CHLORANTRANILIPROLE, CHLORFENAPYR,
CHLORPYRIFOS, CLOFENTEZINE, CYFLUTHRIN, CYPERMETHRIN,
DAMINOZIDE, DIAZINON, DICHLORVOS, DIMETHOATE,
ETHOPROPHOS, ETOFENPROX, ETOXAZOLE, FENOXYCARB,
FENPYROXIMATE, FIPRONIL, FLONICAMID, FLUDIOXONIL,
HEXYTHIAZOX, IMAZALIL, IMIDACLOPRID, KRESOXIM-METHYL,
MGK-264, MALATHION, MALATHION A, METALAXYL,
METHIOCARB, METHOMYL, METHYL PARATHION,
MYCLOBUTANIL, NALED, OXAMYL, PACLOBUTRAZOL,
PERMETHRIN, PERMETHRIN CIS, PERMETHRIN TRANS,
PHOSMET, PRALLETHRIN, PROPICONAZOLE, PROPOXUR,
PYRETHRINS, PYRETHRINS CINERIN I, PYRETHRINS CINERIN I-3,
PYRETHRINS JASMOLIN I, PYRETHRINS JASMOLIN I-3,
PYRETHRINS PYRETHRIN I, PYRIDABEN, SPINOSAD, SPINOSAD A,
SPINOSAD D, SPIROMESIFEN, SPIROTETRAMAT,
SPIROXAMINE, TEBUCONAZOLE, THIACTOPRID,
THIAMETHOXAM, TRIFLOXYSTROBIN

SOL-04: RESIDUAL SOLVENT ANALYSIS BY GC-MS/MS
1,2-DICHLOROETHANE, 2,2-DIMETHYLBUTANE, 2,3-
DIMETHYLBUTANE, 2-METHYLBUTANE, 2-METHYLPENTANE, 3-
METHYLPENTANE, ACETONE, ACETONITRILE, BENZENE,
BUTANE, CHLOROFORM, ETHANOL, ETHYL ACETATE, ETHYL
ETHER, ETHYLENE OXIDE, HEPTANE, HEXANE, ISOBUTANE,
ISOPROPYL ALCOHOL, METHANOL, METHYLENE CHLORIDE,
NEOPENTANE, PENTANE, PROPANE, TOLUENE, TOTAL
XYLENES, TRICHLOROETHYLENE, M-XYLENE, O-XYLENE, P- AND
M-XYLENE, P-XYLENE

POT-01: CANNABINOID POTENCY ANALYSIS BY HPLC-DAD
CBD, CBDA, DELTA-9-THC, THCA, CBDV, THCV, CBG, CBGA,
CBN, DELTA-8-THC, CBC, DELTA-8 + DELTA-9-THC, TOTAL CBD,
TOTAL THC

MET-05: HEAVY METALS ANALYSIS BY ICP-MS
ARSENIC, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY,
NICKEL

PGC-03: CHEMICAL RESIDUE ANALYSIS BY GC-MS/MS
CHLORFENAPYR, METHYL PARATHION

: WATER ACTIVITY
WATER ACTIVITY

\* FOR QUALITY ASSURANCE PURPOSES. NOT A MICHIGAN COMPLIANCE CERTIFICATE.

nūvita QUALITY RELEASE

Sensory: N/A

Visual: N/A

Aroma: N/A

Flavor: N/A

Lab Report (COA): Pass

Signature: [Signature] Release Date: 12-13-22

