

# CERTIFICATE OF ANALYSIS

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

PRODUCED: JAN 27, 2023

**SAMPLE:** FULL SPECTRUM CBD OIL BLEND (100064) (TINCTURE) // **CLIENT:** NUVITA CBD // **BATCH:** PASS  
 REFERENCE FINISHED LOTS 100065, 100066, 100067, 100073



**MATRIX:** TINCTURE  
**SAMPLE ID:** CAM-230120-015  
**COLLECTED ON:** JAN 20, 2023  
**RECEIVED ON:** JAN 20, 2023  
**SAMPLE SIZE:** 30 ML  
**SAMPLED BY:** KAITLYN  
**RECEIVED BY:** KAITLYN  
**SERVING/PACKAGE SIZE:** 0.94 G / 28.2 G

## CANNABINOID OVERVIEW

<b>CBD:</b>	<b>49.0 mg/srv</b>
<b>CBDA:</b>	<b>12.0 mg/srv</b>
<b>TOTAL CANNABINOIDS:</b>	<b>68.3 mg/srv</b>

## BATCH RESULT: PASS

<b>POTENCY</b>	PASS
<b>METALS</b>	PASS
<b>MICROBIAL</b>	PASS
<b>PESTICIDES</b>	PASS
<b>SOLVENTS</b>	PASS
<b>TERPENES</b>	TESTED

## POT-01: CANNABINOID POTENCY ANALYSIS BY HPLC-DAD // JAN 26, 2023

ANALYTE	LIMIT	AMT	AMT	LOD/LOQ (µg/g)	PASS/FAIL	ANALYTE	LIMIT	AMT	AMT	LOD/LOQ (µg/g)	PASS/FAIL
CBC		0.421 %	4.21 mg/g	0.0517/0.172	N/A	THCV		ND	ND	0.0699/0.233	N/A
CBD		5.21 %	52.1 mg/g	0.109/0.363	N/A	<b>TOTAL THC **</b>		0.193 %	1.93 mg/g		N/A
CBDA		1.28 %	12.8 mg/g	0.142/0.474	N/A	<b>TOTAL CBD **</b>		6.33 %	63.3 mg/g		N/A
CBDV		0.0323 %	0.323 mg/g	0.0673/0.224	N/A	<b>CBD/SRV</b>		49.0 mg			N/A
CBG		0.0854 %	0.854 mg/g	0.0576/0.192	N/A	<b>Δ<sup>8</sup> + Δ<sup>9</sup>-THC/SRV</b>		1.81 mg			PASS
CBGA		0.0442 %	0.442 mg/g	0.0328/0.109	N/A	<b>Δ<sup>8</sup>-THC/SRV</b>		ND			PASS
CBN		ND	ND	0.0848/0.283	N/A	<b>Δ<sup>9</sup>-THC/SRV</b>		1.81 mg			N/A
<b>Δ<sup>8</sup> + Δ<sup>9</sup>-THC</b>		0.193 %	1.93 mg/g		N/A	<b>CBD/PKG</b>		1470 mg			N/A
<b>Δ<sup>8</sup>-THC</b>	10 %	ND	ND	0.0578/0.193	PASS	<b>Δ<sup>8</sup> + Δ<sup>9</sup>-THC/PKG</b>		54.4 mg			PASS
<b>Δ<sup>9</sup>-THC</b>		0.193 %	1.93 mg/g	0.102/0.340	N/A	<b>Δ<sup>8</sup>-THC/PKG</b>		ND			PASS
THCA		ND	ND	0.0883/0.294	N/A	<b>Δ<sup>9</sup>-THC/PKG</b>		54.4 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 // JAN 23, 2023

ANALYTE	AMT (%)	LOD/LOQ (µg/g)	PASS/FAIL	ANALYTE	AMT (%)	LOD/LOQ (µg/g)	PASS/FAIL
<b>TOTAL TERPENES</b>	0.255 %		N/A	<b>CAMPHERE</b>	ND	0.500/1.000	N/A
<b>TRANS-CARYOPHYLLENE</b>	0.095 %	0.500/1.000	N/A	<b>CAMPHOR</b>	ND	0.500/1.000	N/A
<b>α-BISABOLOL</b>	0.039 %	0.500/1.000	N/A	<b>CARYOPHYLLENE OXIDE</b>	ND	0.500/1.000	N/A
<b>α-HUMULENE</b>	0.036 %	0.500/1.000	N/A	<b>CEDROL</b>	ND	0.500/1.000	N/A
<b>β-MYRCENE</b>	0.031 %	0.500/1.000	N/A	<b>Δ<sup>3</sup>-CARENE</b>	ND	0.500/1.000	N/A
<b>TRANS-NEROLIDOL</b>	0.011 %	0.500/1.000	N/A	<b>DL-MENTHOL</b>	ND	0.500/1.000	N/A
<b>GUAJOL</b>	0.010 %	0.500/1.000	N/A	<b>EUCALYPTOL</b>	ND	0.500/1.000	N/A
<b>α-TERPINEOL</b>	0.009 %	0.500/1.000	N/A	<b>γ-TERPINENE</b>	ND	0.500/1.000	N/A
<b>LIMONENE</b>	0.009 %	0.500/1.000	N/A	<b>GERANYL ACETATE</b>	ND	0.500/1.000	N/A
<b>(1R)-ENDO-(+)-FENCHYL ALCOHOL</b>	0.006 %	0.500/1.000	N/A	<b>ISOBORNEOL</b>	ND	0.500/1.000	N/A
<b>CIS-β-OCIMENE</b>	0.005 %	0.500/1.000	N/A	<b>ISOPULEGOL</b>	ND	0.500/1.000	N/A
<b>CIS-NEROLIDOL</b>	0.004 %	0.500/1.000	N/A	<b>LINALOOL</b>	ND	0.500/1.000	N/A
<b>(+)-FENCHONE</b>	ND	0.500/1.000	N/A	<b>PULEGONE</b>	ND	0.500/1.000	N/A
<b>α-CEDRENE</b>	ND	0.500/1.000	N/A	<b>SABINENE</b>	ND	0.500/1.000	N/A
<b>α-PHELLANDRENE</b>	ND	0.500/1.000	N/A	<b>SABINENE HYDRATE</b>	ND	0.500/1.000	N/A
<b>α-PINENE</b>	ND	0.500/1.000	N/A	<b>TERPINOLENE</b>	ND	0.500/1.000	N/A
<b>α-TERPINENE</b>	ND	0.500/1.000	N/A	<b>TRANS-β-OCIMENE</b>	ND	0.500/1.000	N/A

**β-PINENE**  
**BORNEOL**

ND 0.500/1.000  
ND 0.500/1.000

N/A  
N/A

**VALENCENE**

ND 0.500/1.000

N/A

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  
JAN 27, 2023

**RESULTS CERTIFIED BY:** DOUGLAS SMITH  
CHIEF SCIENTIST, CAMBIUM ANALYTICA  
JAN 27, 2023



**PGC-03: CHEMICAL RESIDUE ANALYSIS BY GC-MS/MS // JAN 24, 2023**

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	6.230/20.900	PASS	METHYL PARATHION	0.2 µg/g	ND	3.180/10.700	PASS

**PLC-02: CHEMICAL RESIDUE ANALYSIS BY LC-MS/MS // JAN 24, 2023**

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	71.600/239.000	PASS	IMAZALIL	0.2 µg/g	ND	16.100/53.500	PASS
ACEPHATE	0.4 µg/g	ND	16.900/56.200	PASS	IMIDACLOPRID	0.4 µg/g	ND	35.200/117.000	PASS
ACEQUINOCYL	2 µg/g	ND	29.200/97.200	PASS	KRESOXIM-METHYL	0.4 µg/g	ND	12.300/40.900	PASS
ACETAMIPRID	0.2 µg/g	ND	15.000/50.000	PASS	MALATHION	0.2 µg/g	ND	16.200/54.000	PASS
ALDICARB	0.4 µg/g	ND	43.900/146.000	PASS	METALAXYL	0.2 µg/g	ND	18.200/60.600	PASS
AZOXYSTROBIN	0.2 µg/g	ND	10.800/36.200	PASS	METHIOCARB	0.2 µg/g	ND	14.300/47.800	PASS
BIFENAZATE	0.2 µg/g	ND	26.000/86.600	PASS	METHOMYL	0.4 µg/g	ND	9.770/32.600	PASS
BIFENTHRIN	0.2 µg/g	ND	15.100/50.200	PASS	MGK-264	0.2 µg/g	ND	19.900/66.400	PASS
BOSCALID	0.4 µg/g	ND	13.200/43.300	PASS	MYCLOBUTANIL	0.2 µg/g	ND	20.400/68.100	PASS
CARBARYL	0.2 µg/g	ND	12.500/41.700	PASS	NALED	0.5 µg/g	ND	23.800/79.400	PASS
CARBOFURAN	0.2 µg/g	ND	11.100/36.900	PASS	OXAMYL	1 µg/g	ND	36.500/122.000	PASS
CHLORANTRANIL-IPROLE	0.2 µg/g	ND	25.500/84.900	PASS	PACLOBUTRAZOL	0.4 µg/g	ND	37.600/125.000	PASS
CHLORPYRIFOS	0.2 µg/g	ND	25.600/85.300	PASS	PERMETHRIN	0.2 µg/g	ND	39.200/131.000	PASS
CLOFENTEZINE	0.2 µg/g	ND	20.900/69.600	PASS	PHOSMET	0.2 µg/g	ND	24.800/82.600	PASS
CYFLUTHRIN	1 µg/g	ND	40.100/134.000	PASS	PRALLETHRIN	0.2 µg/g	ND	38.500/128.000	PASS
CYPERMETHRIN	1 µg/g	ND	28.700/95.700	PASS	PROPICONAZOLE	0.4 µg/g	ND	42.000/140.000	PASS
DAMINOZIDE	1 µg/g	ND	24.800/82.500	PASS	PROPOXUR	0.2 µg/g	ND	12.000/40.100	PASS
DIAZINON	0.2 µg/g	ND	19.300/64.300	PASS	PYRETHRINS	1 µg/g	ND	20.800/69.200	PASS
DICHLORVOS	1 µg/g	ND	13.000/43.400	PASS	PYRIDABEN	0.2 µg/g	ND	27.100/90.200	PASS
DIMETHOATE	0.2 µg/g	ND	12.700/42.300	PASS	SPINOSAD	0.2 µg/g	ND	6.110/20.400	PASS
ETHOPROPHOS	0.2 µg/g	ND	19.800/66.000	PASS	SPINOSAD A		ND	6.620/22.000	N/A
ETOFENPROX	0.4 µg/g	ND	14.900/49.600	PASS	SPINOSAD D		ND	2.490/8.290	N/A
ETOXAZOLE	0.2 µg/g	ND	14.000/46.700	PASS	SPIROMESIFEN	0.2 µg/g	ND	15.100/50.500	PASS
FENOXYCARB	0.2 µg/g	ND	20.700/69.100	PASS	SPIROTETRAMAT	0.2 µg/g	ND	36.800/123.000	PASS
FENPYROXIMATE	0.4 µg/g	ND	45.500/152.000	PASS	SPIROXAMINE	0.4 µg/g	ND	12.700/42.400	PASS
FIPRONIL	0.4 µg/g	ND	46.700/156.000	PASS	TEBUCONAZOLE	0.4 µg/g	ND	39.000/130.000	PASS
FLONICAMID	1 µg/g	ND	23.000/76.700	PASS	THIACLOPRID	0.2 µg/g	ND	16.000/53.400	PASS
FLUDIOXONIL	0.4 µg/g	ND	11.400/38.000	PASS	THIAMETHOXAM	0.2 µg/g	ND	14.200/47.300	PASS
HEXYTHIAZOX	1 µg/g	ND	29.200/97.500	PASS	TRIFLOXYSTROB-IN	0.2 µg/g	ND	19.400/64.700	PASS



**TYM-028: TOTAL YEAST AND MOLD // JAN 23, 2023**

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

**COL-027: TOTAL COLIFORMS // JAN 24, 2023**

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

**SAL-030: SALMONELLA // JAN 24, 2023**

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

**STEC-030: SHIGA TOXIN PRODUCING E. COLI // JAN 24, 2023**

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

**ASP-029: ASPERGILLUS SPP. // JAN 24, 2023**

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 // JAN 23, 2023**

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	< LOQ	0.026/0.500	PASS
CHROMIUM	2 µg/g	0.136 µg/g	0.027/0.500	PASS
COPPER		0.051 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	0.001 µg/g	0.004/0.050	PASS
NICKEL		0.014 µg/g	0.027/0.500	N/A

**SOL-04: RESIDUAL SOLVENT ANALYSIS BY GC-MS/HS // JAN 25, 2023**

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

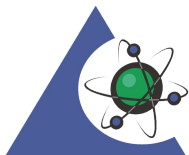
ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
ETHYL ETHER	5000 µg/g	ND	1.370/4.550	PASS
HEPTANE	5000 µg/g	ND	1.310/4.370	PASS
HEXANE	290 µg/g	ND	1.420/4.740	PASS
HEXANES ALL ISOMERS *	290 µg/g	ND		PASS
ISOBUTANE	5000 µg/g	ND	1.600/5.340	PASS
ISOPROPYL ALCOHOL	5000 µg/g	ND	4.900/16.300	PASS
METHANOL	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





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, METHIACARB, 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, THIAACLOPRID, 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

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

