

# CERTIFICATE OF ANALYSIS

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

PRODUCED: SEP 16, 2021

SAMPLE: PET FORMULA, 600MG CBD (BATCH #25321) (TINCTURE) // CLIENT: NUVITA CBD // BATCH: PASS



**MATRIX:** TINCTURE  
**CATEGORY:** EDIBLE  
**SAMPLE ID:** CAM-210913-033  
**COLLECTED ON:** SEP 13, 2021  
**RECEIVED ON:** SEP 13, 2021  
**BATCH/SAMPLE SIZE:** 60 ML / 60 ML  
**SERVING/PACKAGE SIZE:** .94 G / 56.4 G

## CANNABINOID OVERVIEW

<b>CBD:</b>	<b>10.81 mg/srv</b>
<b>CBC:</b>	<b>0 mg/srv</b>
<b>TOTAL CANNABINOIDS:</b>	<b>10.81 mg/srv</b>

## BATCH RESULT: PASS

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

## POT-01: CANNABINOID POTENCY ANALYSIS BY HPLC-DAD // SEP 16, 2021

ANALYTE	AMT (%)	LOD/LOQ (µg/g)	PASS/FAIL	ANALYTE	AMT (%)	LOD/LOQ (µg/g)	PASS/FAIL
CBC	ND	0.0517/0.172	N/A	THCA	ND	0.0883/0.294	N/A
CBD	1.15 %	0.109/0.363	N/A	THCV	ND	0.0699/0.233	N/A
CBDA	ND	0.142/0.474	N/A	TOTAL THC *	ND		N/A
CBDV	ND	0.0673/0.224	N/A	TOTAL CBD *	1.15 %		N/A
CBG	ND	0.0576/0.192	N/A	CBD/SRV	10.8 mg		N/A
CBGA	ND	0.0328/0.109	N/A	Δ <sup>9</sup> -THC/SRV	ND		PASS
CBN	ND	0.0848/0.283	N/A	CBD/PKG	649 mg		N/A
Δ <sup>8</sup> -THC	ND	0.0578/0.193	N/A	Δ <sup>9</sup> -THC/PKG	ND		PASS
Δ <sup>9</sup> -THC	ND	0.102/0.34	N/A				

\* BEYOND SCOPE OF ACCREDITATION  
 \*\* TOTAL THC = (THCA X 0.877) + THC  
 \*\* TOTAL CBD = (CBDA X 0.877) + CBD

## TRP-013: TERPENE ANALYSIS BY GC-MS/HS // SEP 15, 2021

ANALYTE	AMT (%)	LOD/LOQ (µg/g)	PASS/FAIL	ANALYTE	AMT (%)	LOD/LOQ (µg/g)	PASS/FAIL
TOTAL TERPENES *	0.078 %		N/A	LINALOOL *	ND	0.5/1	N/A
TRANS-CARYOPHYLLENE	0.025 %	0.5/1	N/A	TRANS-β-OCIMENE	ND	0.5/1	N/A
α-HUMULENE	0.017 %	0.5/1	N/A	ISOPULEGOL	ND	0.5/1	N/A
α-BISABOLOL	0.011 %	0.5/1	N/A	SABINENE HYDRATE	ND	0.5/1	N/A
GUAIOL	0.006 %	0.5/1	N/A	(+)-FENCHONE	ND	0.5/1	N/A
β-MYRCENE	0.005 %	0.5/1	N/A	GERANYL ACETATE	ND	0.5/1	N/A
CEDROL	0.003 %	0.5/1	N/A	γ-TERPINENE	ND	0.5/1	N/A
ISOBORNEOL	0.002 %	0.5/1	N/A	EUCALYPTOL	ND	0.5/1	N/A
TRANS-NEROLIDOL	0.002 %	0.5/1	N/A	CIS-NEROLIDOL	ND	0.5/1	N/A
LIMONENE	0.002 %	0.5/1	N/A	CARYOPHYLLENE OXIDE	ND	0.5/1	N/A
(1R)-ENDO-(+)-FENCHYL ALCOHOL	0.002 %	0.5/1	N/A	CAMPHOR	ND	0.5/1	N/A
CIS-β-OCIMENE	0.001 %	0.5/1	N/A	CAMPHENE	ND	0.5/1	N/A
VALENCENE	0.001 %	0.5/1	N/A	β-PINENE	ND	0.5/1	N/A
α-PINENE	0.001 %	0.5/1	N/A	α-TERPINENE	ND	0.5/1	N/A
PULEGONE	ND	0.5/1	N/A	α-PHELLANDRENE	ND	0.5/1	N/A
SABINENE	ND	0.5/1	N/A	α-CEDRENE	ND	0.5/1	N/A
TERPINOLENE	ND	0.5/1	N/A	Δ <sup>3</sup> -CARENE	ND	0.5/1	N/A

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**RESULTS CERTIFIED BY:** XIN YAN  
LABORATORY DIRECTOR, CAMBIUM ANALYTICA  
SEP 16, 2021

*Xin Yan*

**RESULTS CERTIFIED BY:** DOUGLAS SMITH  
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SEP 16, 2021

*D. Smith*



**PGC-03: CHEMICAL RESIDUE ANALYSIS BY GC-MS/MS // SEP 15, 2021**

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	6.3/21.1	PASS	METHYL PARATHION	0.2 µg/g	ND	3.22/10.8	PASS

**PLC-02: CHEMICAL RESIDUE ANALYSIS BY LC-MS/MS // SEP 15, 2021**

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	72.4/241	PASS	IMAZALIL	0.2 µg/g	ND	16.2/54.1	PASS
ACEPHATE	0.4 µg/g	ND	17.1/56.8	PASS	IMIDACLOPRID	0.4 µg/g	ND	35.5/119	PASS
ACEQUINOCYL	2 µg/g	ND	29.5/98.3	PASS	KRESOXIM-METHYL	0.4 µg/g	ND	12.4/41.4	PASS
ACETAMIPRID	0.2 µg/g	ND	15.2/50.5	PASS	MALATHION	0.2 µg/g	ND	16.4/54.6	PASS
ALDICARB	0.4 µg/g	ND	44.4/148	PASS	METALAXYL	0.2 µg/g	ND	18.4/61.3	PASS
AZOXYSTROBIN	0.2 µg/g	ND	11/36.6	PASS	METHIOCARB	0.2 µg/g	ND	14.5/48.3	PASS
BIFENAZATE	0.2 µg/g	ND	26.3/87.5	PASS	METHOMYL	0.4 µg/g	ND	9.88/33	PASS
BIFENTHRIN	0.2 µg/g	ND	15.3/50.8	PASS	MGK-264	0.2 µg/g	ND	20.1/67.1	PASS
BOSCALID	0.4 µg/g	ND	13.4/43.7	PASS	MYCLOBUTANIL	0.2 µg/g	ND	20.7/68.9	PASS
CARBARYL	0.2 µg/g	ND	12.6/42.1	PASS	NALED	0.5 µg/g	ND	24.1/80.3	PASS
CARBOFURAN	0.2 µg/g	ND	11.2/37.3	PASS	OXAMYL	1 µg/g	ND	36.9/123	PASS
CHLORANTRANIL-IPROLE	0.2 µg/g	ND	25.7/85.8	PASS	PACLOBUTRAZOL	0.4 µg/g	ND	38/127	PASS
CHLORFENAPYR	1 µg/g	ND	12.6/42.2	PASS	PERMETHRIN	0.2 µg/g	ND	39.6/132	PASS
CHLORPYRIFOS	0.2 µg/g	ND	25.9/86.2	PASS	PHOSMET	0.2 µg/g	ND	25.1/83.5	PASS
CLOFENTEZINE	0.2 µg/g	ND	21.1/70.4	PASS	PRALLETHRIN	0.2 µg/g	ND	38.9/130	PASS
CYFLUTHRIN	1 µg/g	ND	40.5/135	PASS	PROPICONAZOLE	0.4 µg/g	ND	42.4/141	PASS
CYPERMETHRIN	1 µg/g	ND	29/96.7	PASS	PROPOXUR	0.2 µg/g	ND	12.2/40.6	PASS
DAMINOZIDE	1 µg/g	ND	25/83.4	PASS	PYRETHRINS	1 µg/g	ND	21/69.9	PASS
DIAZINON	0.2 µg/g	ND	19.5/65	PASS	PYRIDABEN	0.2 µg/g	ND	27.4/91.2	PASS
DICHLORVOS	1 µg/g	ND	13.1/43.9	PASS	SPINOSAD	0.2 µg/g	ND	6.17/20.6	PASS
DIMETHOATE	0.2 µg/g	ND	12.8/42.8	PASS	SPINOSAD A		ND	6.69/22.3	N/A
ETHOPROPHOS	0.2 µg/g	ND	20/66.7	PASS	SPINOSAD D		ND	2.52/8.39	N/A
ETOFENPROX	0.4 µg/g	ND	15/50.2	PASS	SPIROMESIFEN	0.2 µg/g	ND	15.3/51.1	PASS
ETOXAZOLE	0.2 µg/g	ND	14.2/47.2	PASS	SPIROTETRAMAT	0.2 µg/g	ND	37.2/124	PASS
FENOXYCARB	0.2 µg/g	ND	20.9/69.8	PASS	SPIROXAMINE	0.4 µg/g	ND	12.9/42.9	PASS
FENPYROXIMATE	0.4 µg/g	ND	46/153	PASS	TEBUCONAZOLE	0.4 µg/g	ND	39.4/131	PASS
FIPRONIL	0.4 µg/g	ND	47.3/157	PASS	THIACLOPRID	0.2 µg/g	ND	16.2/54	PASS
FLONICAMID	1 µg/g	ND	23.3/77.6	PASS	THIAMETHOXAM	0.2 µg/g	ND	14.4/47.8	PASS
FLUDIOXONIL	0.4 µg/g	ND	11.5/38.4	PASS	TRIFLOXYSTROB-IN	0.2 µg/g	ND	19.6/65.4	PASS
HEXYTHIAZOX	1 µg/g	ND	29.6/98.5	PASS					



**COL-027: TOTAL COLIFORMS // SEP 14, 2021**

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

**SAL-030: SALMONELLA // SEP 15, 2021**

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

**STEC-030: SHIGA TOXIN PRODUCING E. COLI // SEP 15, 2021**

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

**TYM-028: TOTAL YEAST AND MOLD // SEP 16, 2021**

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

**ASP-029: ASPERGILLUS SPP. // SEP 16, 2021**

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
ASPERGILLUS NIGER	Any amount in 1 gram	ND	N/A
ASPERGILLUS FLAVUS	Any amount in 1 gram	ND	N/A

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
ASPERGILLUS TERREUS	Any amount in 1 gram	ND	N/A
ASPERGILLUS FUMIGATUS	Any amount in 1 gram	ND	N/A

**MET-05: HEAVY METALS ANALYSIS BY ICP-MS // SEP 15, 2021**

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/kg)	PASS/FAIL
ARSENIC	1.5 µg/g	ND	0.0448/0.5	PASS
CADMIUM	0.5 µg/g	< LOQ	0.0256/0.5	PASS
CHROMIUM	2 µg/g	0.016 µg/g	0.0274/0.5	PASS
COPPER		0.011 µg/g	0.0446/0.5	N/A

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/kg)	PASS/FAIL
LEAD	0.5 µg/g	0.001 µg/g	0.0169/0.5	PASS
MERCURY	3 µg/g	ND	0.00439/0.05	PASS
NICKEL		0.024 µg/g	0.0271/0.5	N/A

**SOL-04: RESIDUAL SOLVENT ANALYSIS BY GC-MS // SEP 14, 2021**

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
1,2-DICHLOROETHANE	5 µg/g	ND	0.4/1.34	PASS
2,2-DIMETHYLBUTANE	290 µg/g	ND	0.98/3.27	PASS
2,3-DIMETHYLBUTANE	290 µg/g	ND	2.19/7.32	PASS
2-METHYLBUTANE	5000 µg/g	ND	1.54/5.14	PASS
3-METHYLPENTANE	290 µg/g	ND	0.73/2.44	PASS
ACETONE	5000 µg/g	ND	1.57/5.23	PASS
ACETONITRILE	410 µg/g	ND	1.85/6.17	PASS
BENZENE	2 µg/g	ND	0.18/0.59	PASS
BUTANE	5000 µg/g	ND	1.68/5.59	PASS
BUTANES ALL ISOMERS *	5000 µg/g	ND		PASS
CHLOROFORM	60 µg/g	ND	0.78/2.59	PASS
ETHANOL	5000 µg/g	ND	6.02/20.1	PASS
ETHYL ACETATE	5000 µg/g	ND	1.95/6.49	PASS
ETHYLENE OXIDE	50 µg/g	ND	0.15/0.49	PASS
ETHYL ETHER	5000 µg/g	ND	1.37/4.55	PASS

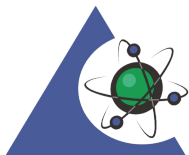
ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
HEPTANE	5000 µg/g	ND	1.31/4.37	PASS
HEXANE	290 µg/g	ND	1.42/4.74	PASS
HEXANES ALL ISOMERS *	290 µg/g	ND		PASS
ISOBUTANE	5000 µg/g	ND	1.6/5.34	PASS
ISOPROPYL ALCOHOL	5000 µg/g	ND	4.9/16.3	PASS
METHANOL	3000 µg/g	ND	7.89/26.4	PASS
METHYLENE CHLORIDE	600 µg/g	ND	1.36/4.53	PASS
NEOPENTANE	5000 µg/g	ND	1.49/4.97	PASS
PENTANE	5000 µg/g	ND	1.46/4.87	PASS
PENTANES ALL ISOMERS *	5000 µg/g	ND		PASS
PROPANE	5000 µg/g	ND	1.95/6.51	PASS
TOLUENE	890 µg/g	ND	1.88/6.26	PASS
TRICHLOROETHYLENE	80 µg/g	ND	0.29/0.96	PASS
TOTAL XYLENES	2170 µg/g	ND	2.02/6.72	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

**POT-01: CANNABINOID POTENCY ANALYSIS BY HPLC-DAD**

CBD, CBDA, DELTA-9-THC, THCA, CBDV, THCV, CBG, CBGA, CBN, DELTA-8-THC, CBC

**TRP-013: TERPENE ANALYSIS BY GC-MS/HS**

(+)-FENCHONE, (1R)-ENDO-(+)-FENCHYL ALCOHOL, CAMPHENE, CAMPHOR, CARYOPHYLLENE OXIDE, CEDROL, DELTA-3-CARENE, EUCALYPTOL, FENCHOL, GERANIOL, GERANYL ACETATE, GUAJOL, ISOBORNEOL, ISOPULEGOL, LIMONENE, NEROLIDOL, OCIMENE, PHELLANDRENE, PULEGONE, SABINENE, SABINENE HYDRATE, TERPINEOL 3, TERPINOLENE, VALENCENE, ALPHA-BISABOLOL, ALPHA-CEDRENE, ALPHA-HUMULENE, ALPHA-PHELLANDRENE, ALPHA-PINENE, ALPHA-TERPINENE, BETA-MYRCENE, BETA-PINENE, CIS-NEROLIDOL, CIS-BETA-OCIMENE, GAMMA-TERPINENE, TRANS-CARYOPHYLLENE, TRANS-NEROLIDOL, TRANS-BETA-OCIMENE

**SOL-04: RESIDUAL SOLVENT ANALYSIS BY GC-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

**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

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