



PINNACLE HEMP

N X T

G E N

SPARK

THCV X D8



License No. 800025015
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

Pinnacle Hemp
2900 Davis Blvd
Joplin, MO 64804

Batch # 101
Batch Date: 2022-01-31

Test Reg State: Oregon

Order # PIN220131-070001
Order Date: 2022-01-31
Sample # AACK807

Sampling Date: 2022-02-03
Lab Batch Date: 2022-02-03
Completion Date: 2022-02-10

Initial Gross Weight: 12.998 g



Potency
Tested

Product Image

Potency - 11

Specimen Weight: 48.330 mg

Tested
(LCU)

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
THCV	1000.000	0.000007	0.001	42.670	4.267
CBGA	1000.000	0.000008	0.001	5.080	0.508
CBD	1000.000	0.000054	0.001	2.970	0.297
CBG	1000.000	0.000248	0.001	1.160	0.116
CBC	1000.000	0.000018	0.001	<LOQ	
Delta-9 THC	1000.000	0.000013	0.001	<LOQ	
Delta-8 THC	1000.000	0.000026	0.001	<LOQ	
CBN	1000.000	0.000014	0.001	<LOQ	
CBDV	1000.000	0.000065	0.001	<LOQ	
CBDA	1000.000	0.000001	0.001	<LOQ	
THCA-A	1000.000	0.000032	0.001	<LOQ	

Potency Summary

Total THC None Detected	Total CBD 0.297%
Total CBG 0.562%	Total CBN None Detected
Other Cannabinoids 4.267%	Total Cannabinoids 5.126%

Xueli Gao
Xueli Gao
Lab Toxicologist
Ph.D., DABT

Aixia Sun
Aixia Sun
Lab Director/Principal Scientist
D.H.Sc., M.Sc., B.Sc., MT (AAB)



Definitions and Abbreviations used in this report: *Total CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.87), *Total THC = THCA-A * 0.877 + Delta 9 THC, *Total THCV = THCV + (THCVA * 0.87), *CBG Total = (CBGA * 0.877) + CBG, *CBN Total = (CBNA * 0.877) + CBN, *Total CBC = CBC + (CBCA * 0.877), *Total THC-O-Acetate = Delta 8 THC-O-Acetate + Delta 9 THC-O-Acetate, *Other Cannabinoids Total = Total Cannabinoids - All the listed cannabinoids on the summary section, *Total Detected Cannabinoids = Delta8-THC + Total CBN + CBT + Delta8-THCV + Total CBG + Total CBD + Total THCV + CBL + Total THC + Total CBC + Total CBDV + Delta10-THC + Total THC-O-Acetate, *Analyte Details above show the Dry Weight Concentrations unless specified as 12% moisture concentration, (mg/ml) = Milligrams per Milliliter, LOQ = Limit of Quantitation, LOD = Limit of Detection, Dilution = Dilution Factor (ppb) = Parts per Billion, (%) = Percent, (cfu/g) = Colony Forming Unit per Gram (cfu/g) = Colony Forming Unit per Gram, (µg/g) = Microgram per Gram (ppm) = Parts per Million, (ppm) = (µg/g), (aw) = aw (area ratio) = Area Ratio, (mg/Kg) = Milligram per Kilogram, *Measurement of Uncertainty = +/- 10%



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License No. 800025015
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

Pinnacle Hemp
2231 Missouri Ave
Carthage, MO 64836

Batch # 17
Batch Date: 2022-01-31

Test Reg State: Oregon

Production Facility: pinnacle hemp
Production Date: 2022-01-31

Order # PIN220131-070001
Order Date: 2022-01-31
Sample # AACK802

Sampling Date: 2022-02-03
Lab Batch Date: 2022-02-03
Completion Date: 2022-02-06

Initial Gross Weight: 13.096 g



Potency
Tested

Product Image

**Delta 8/Delta 10
Potency 12**

Specimen Weight: 48.980 mg

Analyte	LOD (%)	LOQ (%)	Result (mg/g)	(%)
Delta-8 THC	0.000026	0.001	831.400	83.140
CBC	0.000018	0.001	<LOQ	<LOQ
CBD	0.000054	0.001	<LOQ	<LOQ
THCA-A	0.000032	0.001	<LOQ	<LOQ
Delta-9 THC	0.000013	0.001	<LOQ	<LOQ
Delta-10 THC	0.000003	0.001	<LOQ	<LOQ
CBN	0.000014	0.001	<LOQ	<LOQ
CBGA	0.00008	0.001	<LOQ	<LOQ
CBG	0.000248	0.001	<LOQ	<LOQ
CBDV	0.000065	0.001	<LOQ	<LOQ
CBDA	0.00001	0.001	<LOQ	<LOQ
THCV	0.000007	0.001	<LOQ	<LOQ

Tested
(LCUV)

Potency Summary

Total Delta 8 83.140%	Total Delta 10 None Detected
Total THC None Detected	Total CBD None Detected
Total CBG None Detected	Total CBN None Detected
Other Cannabinoids None Detected	Total Cannabinoids 83.140%

Xueli Gao
Ph.D., DABT
Lab Toxicologist

Aixia Sun
D.H.Sc., M.Sc., B.Sc., MT (AAB)
Lab Director/Principal Scientist



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CERTIFICATE OF ANALYSIS



IDENTIFICATION:

PRODUCT NAME: Recovery

PRODUCT DESIGNATION: Proprietary Terpene Blend - Terpology by Dr. Ethan Russo

TT PRODUCT #: TTEB-RCVY

LOT #: T106155

INTENDED FOR USE BY: March 2022

CAS #: Mixture

EC #: Mixture

PARAMETER:	SPECIFICATION:	RESULT:
APPEARANCE:	Clear, Light Yellow Liquid	Clear, Light Yellow Liquid
ODOR:	Wood, Pine, Citrus	Wood, Pine, Citrus

Additional Product Information:

Storage Conditions: Stable when stored in its original container securely tightened and away from heat, open flames, sunlight, combustible materials and hot surfaces. Store in a cool, dry, and well-ventilated place.

TRACE CONTAMINANT LEVELS:

Test Type: Heavy Metals

Contaminant Name	Max. Allowed (ppm)	Test Result	Contaminant Name	Max. Allowed (ppm)	Test Result
Arsenic	0.2	PASSED	Cadmium	0.2	PASSED
Lead	0.5	PASSED	Mercury	0.1	PASSED

Test Type: Pesticide

Contaminant Name	Max. Allowed (ppm)	Test Result	Contaminant Name	Max. Allowed (ppm)	Test Result
Abamectin	0.07	PASSED	Acephate	0.1	PASSED
Acequinocyl	0.1	PASSED	Acetamiprid	0.1	PASSED
Aldicarb	0.4	PASSED	Azoxystrobin	0.02	PASSED
Bifenazate	0.02	PASSED	Bifenthrin	0.1	PASSED
Boscalid	0.1	PASSED	Captan	0.7	PASSED

CERTIFICATE OF ANALYSIS



Test Type: Pesticide

Contaminant Name	Max. Allowed (ppm)	Test Result	Contaminant Name	Max. Allowed (ppm)	Test Result
Carbaryl	0.2	PASSED	Carbofuran	0.2	PASSED
Chlorantraniliprole	0.2	PASSED	Chlordane	0.1	PASSED
Chlorfenapyr	0.2	PASSED	Chlorpyrifos	0.2	PASSED
Clofentezine	0.1	PASSED	Coumaphos	0.1	PASSED
Cyfluthrin	1	PASSED	Cypermethrin	1	PASSED
Daminozide	0.10	PASSED	DDVP (Dichlorvos)	0.1	PASSED
Diazinon	0.1	PASSED	Dimethoate	0.2	PASSED
Dimethomorph	2	PASSED	Ethoprophos	0.2	PASSED
Etofenprox	0.4	PASSED	Etoxazole	0.1	PASSED
Fenhexamid	0.1	PASSED	Fenoxycarb	0.2	PASSED
Fenpyroximate	0.1	PASSED	Fipronil	0.4	PASSED
Fonicamid	0.1	PASSED	Fludioxonil	0.1	PASSED
Hexythiazox	0.1	PASSED	Imazalil	0.10	PASSED
Imidacloprid	0.02	PASSED	Kresoxim-methyl	0.1	PASSED
Malathion	0.2	PASSED	Metalaxyl	0.2	PASSED
Methiocarb	0.2	PASSED	Methomyl	0.4	PASSED
Methyl-Parathion	0.2	PASSED	Mevinphos	0.1	PASSED
MGK-264	0.2	PASSED	Myclobutanil	0.04	PASSED
Naled	0.2	PASSED	Oxamyl	0.5	PASSED
Paclobutrazol	0.10	PASSED	Pentachloronitrobenzene	0.1	PASSED
Permethrins	0.04	PASSED	Phosmet	0.1	PASSED
Piperonyl Butoxide	2	PASSED	Prallethrin	0.1	PASSED
Propiconazole	0.1	PASSED	Propoxur	0.2	PASSED
Pyrethrins	0.5	PASSED	Pyridaben	0.1	PASSED
Spinetoram	0.1	PASSED	Spinosad	0.06	PASSED
Spiromesifen	0.03	PASSED	Spirotetramat	0.02	PASSED
Spiroxamine	0.4	PASSED	Tebuconazole	0.01	PASSED
Thiacloprid	0.2	PASSED	Thiamethoxam	0.2	PASSED
Trifloxystrobin	0.1	PASSED			

CERTIFICATE OF ANALYSIS



Test Type: Residual Solvent

Contaminant Name	Max. Allowed (ppm)	Test Result	Contaminant Name	Max. Allowed (ppm)	Test Result
1,2-Dichloroethane	1.0	PASSED	1,4-Dioxane	380	PASSED
1-Butanol	5000	PASSED	1-Pentanol	5000	PASSED
1-Propanol	5000	PASSED	2,2-Dimethylbutane	50	PASSED
2,3-Dimethylbutane	50	PASSED	2-Butanol	5000	PASSED
2-Butanone	5000	PASSED	2-Ethoxyethanol	160	PASSED
2-Methylbutane	750	PASSED	2-Methylpentane	50	PASSED
2-Methylpropane (Isobutane)	800	PASSED	2-Propanol (IPA)	500	PASSED
3-Methylpentane	50	PASSED	Acetone	750	PASSED
Acetonitrile	60	PASSED	Benzene	1.0	PASSED
Butane	500	PASSED	Chloroform	1.0	PASSED
Cumene (Isopropyl Benzene)	70	PASSED	Cyclohexane	3880	PASSED
Dimethyl Sulfoxide (DMSO)	5000	PASSED	Ethanol	1000	PASSED
Ethyl Acetate	400	PASSED	Ethyl Ether	500	PASSED
Ethylbenzene	150	PASSED	Ethylene Glycol	620	PASSED
Ethylene Oxide	1.0	PASSED	Heptane	500	PASSED
Isopropyl Acetate	60	PASSED	m-Xylene and p-Xylene	150	PASSED
Methanol	250	PASSED	Methylene Chloride	1.0	PASSED
N,N-Dimethylacetamide	880	PASSED	N,N-Dimethylformamide	880	PASSED
n-Hexane	50	PASSED	Naphtha	400	PASSED
Neopentane	750	PASSED	o-Xylene	150	PASSED
Pentane	750	PASSED	Petroleum Ether	400	PASSED
Propane	500	PASSED	Pyridine	200	PASSED
Tetrahydrofuran	720	PASSED	Toluene	150	PASSED
Total Residual Solvents	5000	PASSED	Trichloroethylene	1.0	PASSED
Xylenes	150	PASSED			

Branston Mefferd
Quality Control

Disclaimer: This Certificate of Analysis may contain results provided by contract laboratories external to True Terpenes. This document does not relieve the purchaser from conducting their own tests in order to verify the suitability of this product for its application and to comply with all relevant legal requirements for any goods into which this product is incorporated. Botanically derived and/or synthetic compounds found in this product may contain trace compounds which can potentially result in a slight variance between lots. True Terpenes certifies that this product is not derived from cannabis nor does it contain any cannabinoids or other cannabis-derived extracts.