



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

Certificate of Analysis

Compliance Test

Tranquil Earth CBD, LLC
130 Oak Park Drive
Mooresville, North Carolina 28115

Batch # BS75001SB
Batch Date: 2021-02-03
Extracted From: HEMP BIOMASS

Sampling Method: MSP 7.3.1 Test Reg
State: Florida

Production Facility: ROOT BIOSCIENCE
Production Date: 2021-02-03

Order # ROO210203-020022
Order Date: 2021-02-03
Sample # AAAY847

Sampling Date: 2021-02-05
Lab Batch Date: 2021-02-05
Completion Date: 2021-02-10

Initial Gross Weight: 80.620 g



Product Image

Potency
Tested

Terpenes
Tested

Heavy Metals
Passed

Mycotoxins
Passed

Pesticides
Passed

Residual
Solvents
Passed

Listeria
Monocytogenes
Passed

Pathogenic
Passed



Potency - 11

Specimen Weight: 81.580 mg

Tested

(HPLC/LCMS)

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBD	10.000	0.000054	0.001	29.600	2.960
CBG	10.000	0.000248	0.001	0.353	0.035
CBC	10.000	0.000018	0.001		<LOQ
THCV	10.000	0.000007	0.001		<LOQ
Delta-9 THC	10.000	0.000013	0.001		<LOQ
Delta-8 THC	10.000	0.000026	0.001		<LOQ
CBN	10.000	0.000014	0.001		<LOQ
CBGA	10.000	0.000008	0.001		<LOQ
CBDV	10.000	0.000065	0.001		<LOQ
CBDA	10.000	0.00001	0.001		<LOQ
THCA-A	10.000	0.000032	0.001		<LOQ

Potency Summary

Total CBD 2.960%	Total THC None Detected
Total CBG 0.035%	Total CBN None Detected
Other Cannabinoids None Detected	Total Cannabinoids 2.995%

Terpenes Summary

Analyte	Result (mg/ml) (%)
Total Terpenes: 0%	

Detailed Terpenes Analysis is on the following page

Xueli Gao
Ph.D., DABT
Lab Toxicologist

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



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Terpenes - FL

Specimen Weight: 35.540 mg
Dilution Factor: 1.000

Tested
(GC)

Analyte	LOQ (%)	Result (mg/g)	(%)	Analyte	LOQ (%)	Result (mg/g)	(%)
(+)-Cedrol	0.02	<LOQ	<LOQ	Nerol	0.02	<LOQ	<LOQ
Geraniol	0.02	<LOQ	<LOQ	Geranyl acetate	0.02	<LOQ	<LOQ
Guaiol	0.02	<LOQ	<LOQ	Hexahydrothymol	0.02	<LOQ	<LOQ
Isoborneol	0.02	<LOQ	<LOQ	Isopulegol	0.02	<LOQ	<LOQ
Linalool	0.02	<LOQ	<LOQ	Ocimene	0.014	<LOQ	<LOQ
Fenchyl Alcohol	0.02	<LOQ	<LOQ	Pulegone	0.02	<LOQ	<LOQ
Sabinene	0.02	<LOQ	<LOQ	Sabinene Hydrate	0.02	<LOQ	<LOQ
Terpineol	0.02	<LOQ	<LOQ	Terpinolene	0.02	<LOQ	<LOQ
trans-Caryophyllene	0.02	<LOQ	<LOQ	trans-Nerolidol	0.02	<LOQ	<LOQ
Gamma-Terpinene	0.02	<LOQ	<LOQ	Fenchone	0.02	<LOQ	<LOQ
(R)-(+)-Limonene	0.02	<LOQ	<LOQ	alpha-Terpinene	0.02	<LOQ	<LOQ
3-Carene	0.02	<LOQ	<LOQ	alpha-Bisabolol	0.02	<LOQ	<LOQ
alpha-Cedrene	0.02	<LOQ	<LOQ	alpha-Humulene	0.02	<LOQ	<LOQ
alpha-Phellandrene	0.02	<LOQ	<LOQ	alpha-Pinene	0.02	<LOQ	<LOQ
Farnesene	0.02	<LOQ	<LOQ	beta-Myrcene	0.02	<LOQ	<LOQ
beta-Pinene	0.02	<LOQ	<LOQ	Borneol	0.04	<LOQ	<LOQ
Camphene	0.02	<LOQ	<LOQ	Camphors	0.04	<LOQ	<LOQ
Caryophyllene oxide	0.02	<LOQ	<LOQ	cis-Nerolidol	0.02	<LOQ	<LOQ
Eucalyptol	0.02	<LOQ	<LOQ	Valencene	0.02	<LOQ	<LOQ

Total Terpenes: 0%

Xueli Gao
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Lab Toxicologist

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



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Completion Date: 2021-02-10

Initial Gross Weight: 80.620 g

Heavy Metals

Specimen Weight: 247.400 mg

Dilution Factor: 2.000

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Arsenic (As)	100	1500	<LOQ	Cadmium (Cd)	100	500	<LOQ
Lead (Pb)	100	500	<LOQ	Mercury (Hg)	100	3000	<LOQ
Total Contaminant Load (TCL) None Detected							

Passed
(ICP-MS)

Mycotoxins

Specimen Weight: 178.910 mg

Dilution Factor: 8.384

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Aflatoxin B1	6	20	<LOQ	Aflatoxin B2	6	20	<LOQ
Aflatoxin G1	6	20	<LOQ	Aflatoxin G2	6	20	<LOQ
Ochratoxin A	12	20	<LOQ				

Passed
(LCMS)

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Lab Director/Principal Scientist



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Completion Date: 2021-02-10

Initial Gross Weight: 80.620 g

Pesticides FL V4 **Passed**
(LCMS/GCMS)
Specimen Weight: 178.910 mg
Dilution Factor: 8.384

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Abamectin	28.23	300	<LOQ	Acephate	30	3000	<LOQ
Acequinocyl	48	2000	<LOQ	Acetamiprid	30	3000	<LOQ
Aldicarb	30	100	<LOQ	Azoxystrobin	10	3000	<LOQ
Bifenazate	30	3000	<LOQ	Bifenthrin	30	500	<LOQ
Boscalid	10	3000	<LOQ	Captan	30	3000	<LOQ
Carbaryl	10	500	<LOQ	Carbofuran	10	100	<LOQ
Chlorantraniliprole	10	3000	<LOQ	Chlordane	10	100	<LOQ
Chlorfenapyr	30	100	<LOQ	Chloromequat Chloride	10	3000	<LOQ
Chlorpyrifos	30	100	<LOQ	Clofentezine	30	500	<LOQ
Coumaphos	48	100	<LOQ	Cyfluthrin	30	1000	<LOQ
Cypermethrin	30	1000	<LOQ	Daminozide	30	100	<LOQ
Diazinon	30	200	<LOQ	Dichlorvos	30	100	<LOQ
Dimethoate	30	100	<LOQ	Dimethomorph	48	3000	<LOQ
Ethoprophos	30	100	<LOQ	Etofenprox	30	100	<LOQ
Etoxazole	30	1500	<LOQ	Fenhexamid	10	3000	<LOQ
Fenoxycarb	30	100	<LOQ	Fenpyroximate	30	2000	<LOQ
Fipronil	30	100	<LOQ	Fonicamid	30	2000	<LOQ
Fludioxonil	48	3000	<LOQ	Hexythiazox	30	2000	<LOQ
Imazalil	30	100	<LOQ	Imidacloprid	30	3000	<LOQ
Kresoxim Methyl	30	1000	<LOQ	Malathion	30	2000	<LOQ
Metaxyl	10	3000	<LOQ	Methiocarb	30	100	<LOQ
Methomyl	30	100	<LOQ	methyl-Parathion	10	100	<LOQ
Mevinphos	10	100	<LOQ	Myclobutanil	30	3000	<LOQ
Naled	30	500	<LOQ	Oxamyl	30	500	<LOQ
Paclotrazol	30	100	<LOQ	Pentachloronitrobenzene	10	200	<LOQ
Permethrin	30	1000	<LOQ	Phosmet	30	200	<LOQ
Piperonylbutoxide	30	3000	<LOQ	Prallethrin	30	400	<LOQ
Propiconazole	30	1000	<LOQ	Propoxur	30	100	<LOQ
Pyrethrins	30	1000	<LOQ	Pyridaben	30	3000	<LOQ
Spinetoram	10	3000	<LOQ	Spinosad	30	3000	<LOQ
Spiromesifen	30	3000	<LOQ	Spirotetramat	30	3000	<LOQ
Spiroxamine	30	100	<LOQ	Tebuconazole	30	1000	<LOQ
Thiacloprid	30	100	<LOQ	Thiamethoxam	30	1000	<LOQ
Trifloxystrobin	30	3000	<LOQ	Total Contaminant Load (TCL)	None Detected		

Xueli Gao
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Lab Toxicologist

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Initial Gross Weight: 80.620 g

Residual Solvents - FL (CBD) Passed (GCMS)

Specimen Weight: 148.300 mg
Dilution Factor: 500.000

Analyte	LOQ (ppm)	Action Level (ppm)	Result (ppm)	Analyte	LOQ (ppm)	Action Level (ppm)	Result (ppm)
1,1-Dichloroethene	0.16	8	<LOQ	1,2-Dichloroethane	0.04	5	<LOQ
Acetone	2.08	5000	<LOQ	Acetonitrile	1.17	410	<LOQ
Benzene	0.02	2	<LOQ	Butanes	2.5	2000	<LOQ
Chloroform	0.04	60	<LOQ	Ethanol	2.78	5000	245.894
Ethyl Acetate	1.11	5000	<LOQ	Ethyl Ether	1.39	5000	<LOQ
Ethylene Oxide	0.1	5	<LOQ	Heptane	1.39	5000	<LOQ
Hexane	1.17	290	<LOQ	Isopropyl alcohol	1.39	500	<LOQ
Methanol	0.69	3000	<LOQ	Methylene chloride	2.43	600	<LOQ
Pentane	2.08	5000	<LOQ	Propane	5.83	2100	<LOQ
Toluene	2.92	890	<LOQ	Total Xylenes	2.92	2170	<LOQ
Trichloroethylene	0.49	80	<LOQ				

Listeria Monocytogenes Passed (qPCR)

Specimen Weight: 995.500 mg
Dilution Factor: 1.000

Analyte	Action Level (cfu/g)	Result
Listeria Monocytogenes	1	Absence in 1g

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Pathogenic SAE (qPCR)

Specimen Weight: 234.200 mg

Dilution Factor: 1.000

Passed
(qPCR)

Analyte	Action Level (cfu/g)	Result (cfu/g)	Analyte	Action Level (cfu/g)	Result (cfu/g)
Aspergillus (Flavus, Fumigatus, Niger, Terreus)	1	Absence in 1g	E.Coli	1	Absence in 1g
			Salmonella	1	Absence in 1g

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