



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 # BS75001C
Batch Date: 2021-02-23
Extracted From: Hemp Biomass

Test Reg State: Florida

Production Facility: Root Bioscience NC, LLC
Production Date: 2021-02-23

Order # RO0210223-010058
Order Date: 2021-02-23
Sample # AABA245

Sampling Date: 2021-02-24
Lab Batch Date: 2021-02-24
Completion Date:

Initial Gross Weight: 79.021 g



Product Image

Potency Tested

Heavy Metals Passed

Mycotoxins Passed

Pesticides Passed

Residual Solvents Passed

Listeria Monocytogenes Passed

Pathogenic Passed

Potency Summary

Potency - 11

Specimen Weight: 99.160 mg

Tested (HPLC/LCMS)

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBD	10.000	0.000054	0.001	52.900	5.290
CBG	10.000	0.000248	0.001	0.934	0.093
CBDA	10.000	0.00001	0.001	0.255	0.025
THCV	10.000	0.000007	0.001	0.173	0.017
CBC	10.000	0.000018	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	0.00008	0.001		<LOQ
CBDV	10.000	0.000065	0.001		<LOQ
THCA-A	10.000	0.000032	0.001		<LOQ

Total THC None Detected	Total CBD 5.312%
Total CBG 0.093%	Total CBN None Detected
Other Cannabinoids 0.017%	Total Cannabinoids 5.423%

Xueli Gao
Ph.D., DABT
Lab Toxicologist

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



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Tranquil Earth CBD, LLC Batch # BS75001C Test Reg State: Florida Production Facility: Root Bioscience NC, LLC
130 Oak Park Drive Batch Date: 2021-02-23 Extracted From: Hemp Biomass Production Date: 2021-02-23
Mooresville, North Carolina 28115

Order # ROO210223-010058 Sampling Date: 2021-02-24 Initial Gross Weight: 79.021 g
Order Date: 2021-02-23 Lab Batch Date: 2021-02-24
Sample # AABA245 Completion Date:

H Heavy Metals Passed (ICP-MS)
Specimen Weight: 254.460 mg

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							

Mycotoxins Passed (LCMS)
Specimen Weight: 198.900 mg

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				

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Lab Toxicologist

Aixia Sun
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Production Facility: Root Bioscience NC, LLC
Production Date: 2021-02-23

Order # ROO210223-010058
Order Date: 2021-02-23
Sample # AABA245

Sampling Date: 2021-02-24
Lab Batch Date: 2021-02-24
Completion Date:

Initial Gross Weight: 79.021 g

Pesticides FL V4 **Passed**
(LCMS/GCMS)
Specimen Weight: 198.900 mg
Dilution Factor: 7.542

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
Metalaxyl	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		

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Initial Gross Weight: 79.021 g

Residual Solvents - FL (CBD) **Passed**
(GCMS)

Specimen Weight: 9.700 mg
Dilution Factor: 1.000

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	<LOQ
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: 1006.700 mg
Dilution Factor: 1.000

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

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Initial Gross Weight: 79.021 g

Pathogenic SAE (qPCR)

Specimen Weight: 271.060 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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