



DEA No. RA0571996
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

MD-Neurosolutions
1968 S. Coast Hwy
#4322
Laguna Beach, CA 92651

Batch # 204001
Batch Date: 2022-04-12
Extracted From: hemp

Sampling Method: MSP 7.3.1
Test Reg State: Oregon

Order # LAU220414-010002
Order Date: 2022-04-14
Sample # AACB172

Sampling Date:
Lab Batch Date:
Completion Date: 2022-05-25

Initial Gross Weight: 38.806 g

Number of Units: 11
Net Weight per Unit: 415.000 mg



Product Image

Potency Tested	Terpenes Tested	Heavy Metals Passed	Mycotoxins Passed	Pesticides Passed
Residual Solvents Passed	Pathogenic Microbiology Passed	Listeria Monocytogenes Passed		

Potency 10
Specimen Weight: 113.150 mg

Tested
SOP13.001 (LCUV)

Potency Summary

-	Total THC None Detected	5.328%	Total CBD 22.110mg
2.557%	Total CBG 10.610mg	5.201%	Total CBN 21.580mg
0.084%	Other Cannabinoids 0.350mg	13.170%	Total Cannabinoids 54.660mg

Pieces For Panel: 30

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBD	1000.000	0.000054	0.002	53.280	5.328
CBN	1000.000	0.000014	0.002	52.010	5.201
CBG	1000.000	0.000248	0.002	25.570	2.557
CBDV	1000.000	0.000065	0.002	0.840	0.084
CBC	1000.000	0.000018	0.002	<LOQ	
THCA	1000.000	0.000032	0.002	<LOQ	
Delta-9 THC	1000.000	0.000013	0.002	<LOQ	
CBGA	1000.000	0.000008	0.002	<LOQ	
CBDA	1000.000	0.000001	0.002	<LOQ	
THCV	1000.000	0.000007	0.002	<LOQ	

Terpenes Summary

Analyte	Result (mg/g)	(%)
Linalool	11.48	1.148%
beta-Pinene	3.25	0.325%
alpha-Phellandrene	2.63	0.263%
(R)-(+)-Limonene	2.42	0.242%
trans-Caryophyllene	1.47	0.147%
trans-Nerolidol	0.71	0.071%

Total Terpenes: 2.196%

Detailed Terpenes Analysis is on the following page

Xueli Gao
Ph.D., DABT
Lab Toxicologist

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



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 = Delta6a10a-THC + 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, LOD = Limit of Detection, (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%

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.



DEA No. RA0571996
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

MD-Neurosolutions
1968 S Coast Hwy
#4322
Laguna Beach, CA 92651

Batch # 204001
Batch Date: 2022-04-12
Extracted From: hemp

Sampling Method: MSP 7.3.1
Test Reg State: Oregon

Order # LAU220414-010002
Order Date: 2022-04-14
Sample # AACST172

Sampling Date:
Lab Batch Date:
Completion Date: 2022-05-25

Initial Gross Weight: 38.806 g

Number of Units: 11
Net Weight per Unit: 415.000 mg

Terpenes

Specimen Weight: 112.100 mg

Tested
SOP13.023 (GC/GCMS)

Dilution Factor: 20.000

Analyte	LOQ (%)	Result (mg/g)	(%)	Analyte	LOQ (%)	Result (mg/g)	(%)
Linalool	0.002	11.480	1.148	(+)-Cedrol	0.002	<LOQ	<LOQ
beta-Pinene	0.002	3.250	0.325	Fenchyl Alcohol	0.002	<LOQ	<LOQ
alpha-Phellandrene	0.002	2.630	0.263	Gamma-Terpinene	0.002	<LOQ	<LOQ
(R)-(+)-Limonene	0.002	2.420	0.242	beta-Myrcene	0.002	<LOQ	<LOQ
trans-Caryophyllene	0.002	1.470	0.147	3-Carene	0.002	<LOQ	<LOQ
trans-Nerolidol	0.002	0.710	0.071	alpha-Bisabolol	0.002	<LOQ	<LOQ
Total Terpeneol	0.001	<LOQ	<LOQ	alpha-Cedrene	0.002	<LOQ	<LOQ
Terpinolene	0.002	<LOQ	<LOQ	alpha-Humulene	0.002	<LOQ	<LOQ
Sabinene Hydrate	0.002	<LOQ	<LOQ	alpha-Pinene	0.002	<LOQ	<LOQ
Sabinene	0.002	<LOQ	<LOQ	alpha-Terpinene	0.002	<LOQ	<LOQ
Pulegone	0.002	<LOQ	<LOQ	Borneol	0.004	<LOQ	<LOQ
Geraniol	0.002	<LOQ	<LOQ	Fenchone	0.002	<LOQ	<LOQ
Ocimene	0.000	<LOQ	<LOQ	Camphene	0.002	<LOQ	<LOQ
Nerol	0.002	<LOQ	<LOQ	Camphors	0.006	<LOQ	<LOQ
Isopulegol	0.002	<LOQ	<LOQ	Caryophyllene oxide	0.002	<LOQ	<LOQ
Isoborneol	0.002	<LOQ	<LOQ	cis-Nerolidol	0.002	<LOQ	<LOQ
Hexahydrothymol	0.002	<LOQ	<LOQ	Eucalyptol	0.002	<LOQ	<LOQ
Guaiol	0.002	<LOQ	<LOQ	Farnesene	0.002	<LOQ	<LOQ
Geranyl acetate	0.002	<LOQ	<LOQ	Valencene	0.002	<LOQ	<LOQ

Total Terpenes: 2.196%

Mycotoxins

Specimen Weight: 268.000 mg

Passed
SOP13.007 (LCMS)

Dilution Factor: 5.597

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

Pathogenic Microbiology SAE (MicroArray)

Passed
SOP13.019 (Micro Array)

Specimen Weight: 1005.500 mg

Dilution Factor: 1.000

Analyte	Result (cfu/g)	Analyte	Result (cfu/g)
Aspergillus flavus	Absence in 1g	Aspergillus terreus	Absence in 1g
Aspergillus fumigatus	Absence in 1g	Salmonella	Absence in 1g
Aspergillus niger	Absence in 1g	STEC E. Coli	Absence in 1g

Xueli Gao
Ph.D., DABT
Lab Toxicologist

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



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 = Delta6a10a-THC + Delta8-THC + Total CBN + CBT + Delta8-THCV + Total CBG + Total CBD + Total THCV + 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, (aw) = Area Ratio, (mg/Kg) = Milligram per Kilogram, *Measurement of Uncertainty = +/- 10%

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.



DEA No. RA0571996
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

MD-Neurosolutions
1968 S. Coast Hwy
#4322
Laguna Beach, CA 92651

Batch # 204001
Batch Date: 2022-04-12
Extracted From: hemp

Sampling Method: MSP 7.3.1
Test Reg State: Oregon

Order # LAU220414-010002
Order Date: 2022-04-14
Sample # AACST172

Sampling Date:
Lab Batch Date:
Completion Date: 2022-05-25

Initial Gross Weight: 38.806 g

Number of Units: 11
Net Weight per Unit: 415.000 mg

Pesticides

Specimen Weight: 268.000 mg

Passed
SOP13.007
(LCMS/GCMS)

Dilution Factor: 5.597

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Abamectin	28.23	300	<LOQ	Imazalil	30	100	<LOQ
Acephate	30	3000	<LOQ	Imidacloprid	30	3000	<LOQ
Acequinocyl	48	2000	<LOQ	Kresoxim Methyl	30	1000	<LOQ
Acetamiprid	30	3000	<LOQ	Malathion	30	2000	<LOQ
Aldicarb	30	100	<LOQ	Metalaxyl	10	3000	<LOQ
Azoxystrobin	10	3000	<LOQ	Methiocarb	30	100	<LOQ
Bifenazate	30	3000	<LOQ	Methomyl	30	100	<LOQ
Bifenthrin	30	500	<LOQ	Mevinphos	30	100	<LOQ
Carbaryl	10	500	<LOQ	Myclobutanil	30	3000	<LOQ
Chlorfenapyr	48	100	<LOQ	Naled	30	500	<LOQ
Chlorpyrifos	30	100	<LOQ	Oxamyl	30	500	<LOQ
Clofentezine	30	500	<LOQ	Pacllobutrazol	30	100	<LOQ
Coumaphos	30	100	<LOQ	Parathion-methyl	48	100	<LOQ
Cyfluthrin	30	1000	<LOQ	Pentachloronitro benzene	30	200	<LOQ
Cypermethrin	30	1000	<LOQ	Permethrin	30	1000	<LOQ
Daminozide	30	100	<LOQ	Phosmet	30	200	<LOQ
Diazinon	30	200	<LOQ	Piperonylbutoxid e	30	3000	<LOQ
Dichlorvos	30	100	<LOQ	Prallethrin	30	400	<LOQ
Dimethoate	30	100	<LOQ	Propiconazole	30	1000	<LOQ
Dimethomorph	30	3000	<LOQ	Propoxur	30	100	<LOQ
Ethoprophos	30	100	<LOQ	Pyrethrins	30	1000	<LOQ
Etofenprox	30	100	<LOQ	Pyridaben	30	3000	<LOQ
Etoxazole	30	1500	<LOQ	Spinetoram	30	3000	<LOQ
Fenhexamid	30	3000	<LOQ	Spiromesifen	30	3000	<LOQ
Fenoxycarb	30	100	<LOQ	Spirotetramat	30	3000	<LOQ
Fenpyroximate	30	2000	<LOQ	Spiroxamine	30	100	<LOQ
Fipronil	30	100	<LOQ	Tebuconazole	30	1000	<LOQ
Fonicamid	30	2000	<LOQ	Thiacloprid	30	100	<LOQ
Fludioxonil	30	3000	<LOQ	Thiamethoxam	30	1000	<LOQ
Hexythiazox	30	2000	<LOQ	Trifloxystrobin	30	3000	<LOQ

Residual Solvents - FL (CBD)

Specimen Weight: 156.600 mg

Passed
SOP13.039 (GCMS)

Dilution Factor: 500.000

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

Heavy Metals

Specimen Weight: 248.800 mg

Passed
SOP13.048 (ICP-MS)

Dilution Factor: 200

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Arsenic (As)	100	1500	<LOQ	Lead (Pb)	100	500	<LOQ
Cadmium (Cd)	100	500	<LOQ	Mercury (Hg)	100	3000	<LOQ

Listeria Monocytogenes

Specimen Weight: 1006.600 mg

Passed
SOP13.010 (qPCR)

Dilution Factor: 1.000

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

Xueli Gao
Ph.D., DABT
Lab Toxicologist

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



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 = Delta6a10a-THC + 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, (aw) = area ratio = Area Ratio, (mg/Kg) = Milligram per Kilogram, *Measurement of Uncertainty = +/- 10%

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.