

Comprehensive Analysis Report

Sample Overview

Client: Sawyer Labs

None

Sample Name: CBD Magnesium Cream

Sample Matrix: Topical Applicant

Sample Lot: 10666

Date Received: 08/14/2025

APRC #: SAW250815E

Assay	Disposition	Date Tested
Hemp or R&D Cannabinoid Testing (Potency)	Tested	08/18/2025
Heavy Metals - Utah State Cannabis Panel	Tested	08/21/2025
Microbial: Quantitative and Pathogen Detection Combo	Tested	08/18/2025
Pesticide Screen (APRC Panel)	Tested	08/21/2025
Hemp or R&D Residual Solvents	Tested	08/21/2025
Mycotoxin Quantitation	Tested	08/21/2025



Accreditation #115229

Aromatic Plant Research Center is an ISO 17025:2017 certified laboratory.

Instrument Analysis Report

Potency

Method: SOP 1-2026.03

Sample Name: CBD Magnesium Cream

APRC Lot Number: SAW250815E

Cannabinoid	RT	Total %	Total mg/g
Cannabidivarinic Acid (CBDVA)	ND	ND	ND
Cannabidivarin (CBDV)	ND	ND	ND
Cannabidiolic Acid (CBDA)	ND	ND	ND
Cannabigerolic Acid (CBGA)	ND	ND	ND
Cannabinol (CBN)	5.17	0.08	0.79
Cannabidiol (CBD)	3.48	2.33	23.30
Cannabigerol (CBG)	ND	ND	ND
Tetrahydrocannabivarin (THCV)	ND	ND	ND
Tetrahydrocannabivarin Acid (THCVA)	ND	ND	ND
Delta-9-Tetrahydrocannabinol (Δ 9-THC)	6.52	0.20	2.01
Delta-8-Tetrahydrocannabinol (Δ 8-THC)	ND	ND	ND
Tetrahydrocannabinolic acid (THCA-A)	ND	ND	ND
Cannabichromene (CBC)	8.19	0.20	1.97
Cannabichromene Acid (CBCA)	ND	ND	ND
Δ 10 and Δ 6a,10a-Tetrahydrocannabinol, mixed isomers	ND	ND	ND
(6aR,9R)- Δ 10-Tetrahydrocannabinidiol	NT	NT	NT
(6aR,9S)- Δ 10-Tetrahydrocannabinidiol	NT	NT	NT
9(R+S)- Δ 6a,10a-Tetrahydrocannabinidiol	NT	NT	NT
Cannabicitran (CBTC)	ND	ND	ND

Performed by: Sunita Timsina

Reviewed by: Tessa Crook

	%	mg/g
Total Cannabinoids	2.81	28.07
Total THC ^t	0.20	2.01
Total CBD ^s	2.33	23.30

^tTotal Thc is calculated by Δ 9-THC + (THCA-A*0.877)

^sTotal CBD is calculated by CBD + (CBDA*0.877)

LOD > 0.005% by mass, LOQ > 0.01% by mass

Instrument Analysis Report

Heavy Metals

Method: CTLA

Sample Name: CBD Magnesium Cream

APRC Lot Number: SAW250815E

Analyte	Result (ppm)	LOD (ppm)	Threshold (ppm)	Pass/Fail
Arsenic	0.003	0.001	2.00	Pass
Cadmium	<0.001	0.001	0.82	Pass
Lead	0.005	0.001	1.20	Pass
Mercury	<0.001	0.001	0.40	Pass

Heavy metal analysis is completed in partnership with Contract Testing Laboratories of America, Orem UT.

Performed by: CTLA

Reviewed by: Nicholas Saichek



Instrument Analysis Report

Microbial Impurities

Method: SOP 1-2034.01 and 1-2035.01 Sample Name: CBD Magnesium Cream APRC Lot Number: SAW250815E

Total Counts			
Microbial Group:	Result (CFU/g):	Specification:	Disposition:
Total Aerobic Bacteria	<10	≤250	Pass
Total Yeast and Mold	<10	≤250	Pass

Specific Organism Identification			
Microbial Organism:	Result:	Specification:	Disposition:
Aspergillus flavus	NT	NT	Not Tested
Aspergillus fumigatus	NT	NT	Not Tested
Aspergillus niger	NT	NT	Not Tested
Aspergillus terreus	NT	NT	Not Tested
E. coli	NT	NT	Not Tested
STEC	NT	NT	Not Tested
Salmonella - Specific Gene	NT	NT	Not Tested
Staphylococcus aureus	Not Detected	Not Detected	Pass
Pseudomonas aeruginosa	Not Detected	Not Detected	Pass

Performed by: Heidi Kipp

Notes: Foreign Matter: Not Detected.

Reviewed by: Nicholas Saichek

Instrument Analysis Report

Pesticides

Method:

Sample Name: CBD Magnesium Cream

APRC Lot Number: SAW250815E

Pesticide:	Finding	Action Limit (µg/g)	Pass/Fail
Abamectin	ND	0.5	Pass
Acephate	ND	0.4	Pass
Acequinocyl	ND	2.0	Pass
Acetamiprid	ND	0.2	Pass
Aldicarb	ND	0.4	Pass
Azoxystrobin	ND	0.2	Pass
Bifenazate	ND	0.2	Pass
Bifenthrin	ND	0.2	Pass
Boscalid	ND	0.4	Pass
Carbaryl	ND	0.2	Pass
Carbofuran	ND	0.2	Pass
Chlorantraniliprole	ND	0.2	Pass
Chlorfenapyr	ND	1.0	Pass
Chlorpyrifos	ND	0.2	Pass
Clofentezine	ND	0.2	Pass
Cyfluthrin	ND	1.0	Pass
Cypermethrin	ND	1.0	Pass
Daminozide	ND	1.0	Pass
Dichlorvos	ND	0.1	Pass
Diazinon	ND	0.2	Pass
Dimethoate	ND	0.2	Pass
Ethoprophos	ND	0.2	Pass
Etofenprox	ND	0.4	Pass
Etoxazole	ND	0.2	Pass
Fenoxycarb	ND	0.2	Pass
Fenpyroximate	ND	0.4	Pass
Fipronil	ND	0.4	Pass
Fonicamid	ND	1.0	Pass
Fludioxonil	ND	0.4	Pass

Pesticide:	Finding	Action Limit (µg/g)	Pass/Fail
Hexythiazox	ND	1.0	Pass
Imazalil	ND	0.2	Pass
Imidacloprid	ND	0.4	Pass
Kresoxim-methyl	ND	0.4	Pass
Malathion	ND	0.2	Pass
Metalaxyl	ND	0.2	Pass
Methiocarb	ND	0.2	Pass
Methomyl	ND	0.4	Pass
Methyl parathion	ND	0.2	Pass
MGK-264	ND	0.2	Pass
Myclobutanil	ND	0.2	Pass
Naled	ND	0.5	Pass
Oxamyl	ND	1.0	Pass
Paclobutrazol	ND	0.4	Pass
Permethrins	ND	0.2	Pass
Phosmet	ND	0.2	Pass
Piperonyl butoxide	ND	2.0	Pass
Prallethrin	ND	0.2	Pass
Propiconazole	ND	0.4	Pass
Propoxur	ND	0.2	Pass
Pyrethrin	ND	1.0	Pass
Pyridaben	ND	0.2	Pass
Spinosad	ND	0.2	Pass
Spiromesifen	ND	0.2	Pass
Spirotetramat	ND	0.2	Pass
Spiroxamine	ND	0.4	Pass
Tebuconazole	ND	0.4	Pass
Thiacloprid	ND	0.2	Pass
Thiamethoxam	ND	0.2	Pass
Trifloxystrobin	ND	0.2	Pass

Performed by: Tessa Crook Reviewed by: Nicholas Saichek

Pesticide testing performed in a non-ISO 17025:2017 accredited facility. Pass/Fail determinations based on Utah Administrative Rule R68-29.

Instrument Analysis Report

Residual Solvents

Method: SOP 1-2027.03

Sample Name: CBD Magnesium Cream

APRC Lot Number: SAW250815E

Residual Solvent	Finding (µg/g)	Action Level (µg/g)	Pass/Fail
Dimethyl sulfoxide	2624.340	5000	Pass
N,N-dimethylacetamide	ND	1090	Pass
1,2 Dimethoxyethane	ND	100	Pass
1,4 Dioxane	ND	380	Pass
1-Butanol	ND	5000	Pass
1-Pentanol	ND	5000	Pass
1-Propanol	ND	5000	Pass
2-Butanone	ND	5000	Pass
2-Butanol	ND	5000	Pass
2-Ethoxyethanol	ND	160	Pass
2-Methylbutane	ND	5000	Pass
2-Propanol	ND	5000	Pass
Acetone	ND	5000	Pass
Acetonitrile	ND	410	Pass
Benzene	ND	2	Pass
Butane	ND	5000	Pass
Cumene	ND	70	Pass
Cyclohexane	ND	3880	Pass
Dichloromethane	ND	600	Pass
2,2-Dimethylbutane	ND	290	Pass
2,3-Dimethylbutane	ND	290	Pass
m,p-Xylene	ND	See Total Xylenes	Pass
o-Xylene	ND	See Total Xylenes	Pass
Ethanol	ND	5000	Pass
Ethyl Acetate	ND	5000	Pass
Ethyl Benzene	ND	See Total Xylenes	Pass
Ethyl Ether	ND	5000	Pass
Ethylene Glycol	ND	620	Pass
Ethylene Oxide	ND	50	Pass

Residual Solvent	Finding (µg/g)	Action Level (µg/g)	Pass/Fail
Heptane	ND	5000	Pass
Hexane	ND	290	Pass
Isopropyl Acetate	ND	5000	Pass
Methanol	3.359	3000	Pass
Methylpropane	ND	5000	Pass
2-Methylpentane	ND	290	Pass
3-Methylpentane	ND	290	Pass
N,N-Dimethylformamide	ND	880	Pass
Pentane	16.580	5000	Pass
Propane	ND	5000	Pass
Pyridine	ND	100	Pass
Sulfolane	ND	160	Pass
Tetrahydrofuran	ND	720	Pass
Toluene	ND	890	Pass
Total Xylenes	ND	2170	Pass

† Per Utah state code 4-41a-701(3) Section R68-29-6

‡ Total Xylenes is a combination of the following: o-Xylene, m-Xylene, p-Xylene, and Ethylbenzene

Overall Disposition: Pass
 Performed By: Anil Rokaya
 Reviewed By: Tessa Crook

Instrument Analysis Report

Mycotoxins

Method: Mycotoxin

Sample Name: CBD Magnesium Cream

APRC Lot Number: SAW250815E

Mycotoxin	Finding (µg/kg)	Limit(µg/kg)	Pass/Fail
Aflatoxin B1:	ND		
Aflatoxin B2:	ND		
Aflatoxin G1:	ND		
Aflatoxin G2:	ND		
Total Aflatoxins:	0	20	Pass
Ochratoxin A:	ND	20	Pass

Performed by: Tessa Crook

Reviewed by: Nicholas Saichek



Approved By:
Nicholas Saichek, PhD

Senior Scientist Mass Spectrometry
08/21/2025

Mycotoxin testing performed in a non-ISO 17025:2017 accredited facility. Pass/Fail determinations based on Utah Administrative Rule R68-29.