Parsing MCR Labs MA Cannabis Lab test COA (Certificate of Analysis) pdf files with “Cannlytics”

Data Science models love data! “Cannlytics” (open source software) collects Cannabis Lab Test Data via public state open datasets, lab public data via url, lab datasets provided with permission for integrity check,... customer/client COA pdfs.

Cannabis Data Scientists don’t be afraid to get your hands dirty collecting valuable data.
Let’s roll up our sleeves and use pdfplumber to parse new COA Lab Report pdf files.
My notes adding “MCR Lab 5,6,8 page report” support to Cannlytics `mcrlabs.py` 1st pass

Feb 6, 2023 walking the dog.

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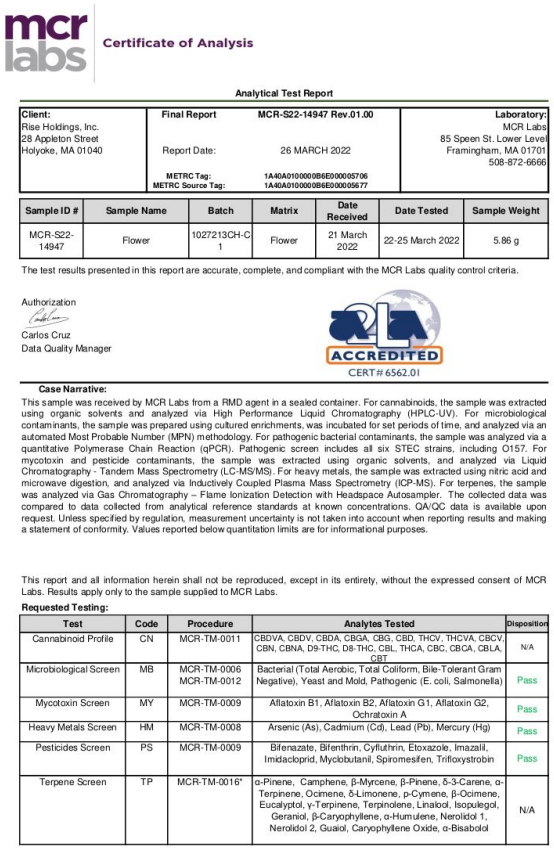
www.cannlytics.com contributor

MCR Labs MA COA Page 1 Lab/Client/Product Information



mcr labs

Certificate of Analysis

Analytical Test Report

Client:	Final Report	MCR-S22-14947 Rev.01.00	Laboratory:
Rise Holdings, Inc. 28 Appleton Street Holyoke, MA 01040	Report Date:	26 MARCH 2022	MCR Labs 85 Speen St. Lower Level Framingham, MA 01701 508-872-6666
	METRC Tag: METRC Source Tag:	1A40A0100000B6E000005706 1A40A0100000B6E000005677	

Sample ID #	Sample Name	Batch	Matrix	Date Received	Date Tested	Sample Weight
MCR-S22-14947	Flower	1027213CH-C-1	Flower	21 March 2022	22-25 March 2022	5.86 g

The test results presented in this report are accurate, complete, and compliant with the MCR Labs quality control criteria.

Authorization

Carlos Cruz
Data Quality Manager

ACCREDITED
CERT # 6562.01

Case Narrative:

This sample was received by MCR Labs from a RMD agent in a sealed container. For cannabinoids, the sample was extracted using organic solvents and analyzed via High Performance Liquid Chromatography (HPLC-UV). For microbiological contaminants, the sample was prepared using cultured enrichments, was incubated for set periods of time, and analyzed via an automated Most Probable Number (MPN) methodology. For pathogenic bacterial contaminants, the sample was analyzed via a quantitative Polymerase Chain Reaction (qPCR). Pathogenic screen includes all six STEC strains, including O157. For mycotoxin and pesticide contaminants, the sample was extracted using organic solvents, and analyzed via Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS). For heavy metals, the sample was extracted using nitric acid and microwave digestion, and analyzed via Inductively Coupled Plasma Mass Spectrometry (ICP-MS). For terpenes, the sample was analyzed via Gas Chromatography – Flame Ionization Detection with Headspace Autosampler. The collected data was compared to data collected from analytical reference standards at known concentrations. QA/QC data is available upon request. Unless specified by regulation, measurement uncertainty is not taken into account when reporting results and making a statement of conformity. Values reported below quantitation limits are for informational purposes.

This report and all information herein shall not be reproduced, except in its entirety, without the expressed consent of MCR Labs. Results apply only to the sample supplied to MCR Labs.

Requested Testing:

Test	Code	Procedure	Analytes Tested	Disposition
Cannabinoid Profile	CN	MCR-TM-0011	CBDVA, CBDV, CBDA, CBGA, CBG, CBD, THCV, THCVA, CBCV, CBN, CBNA, D9-THC, D8-THC, CBL, THCA, CBC, CBCA, CBLA, CBT	N/A
Microbiological Screen	MB	MCR-TM-0006 MCR-TM-0012	Bacterial (Total Aerobic, Total Coliform, Bile-Tolerant Gram Negative), Yeast and Mold, Pathogenic (E. coli, Salmonella)	Pass
Mycotoxin Screen	MY	MCR-TM-0009	Aflatoxin B1, Aflatoxin B2, Aflatoxin G1, Aflatoxin G2, Ochratoxin A	Pass
Heavy Metals Screen	HM	MCR-TM-0008	Arsenic (As), Cadmium (Cd), Lead (Pb), Mercury (Hg)	Pass
Pesticides Screen	PS	MCR-TM-0009	Bifenazate, Bifenthrin, Cyfluthrin, Etoxazole, Imazalil, Imidacloprid, Myclobutanil, Spiromesifen, Trifloxystrobin	Pass
Terpene Screen	TP	MCR-TM-0016*	α-Pinene, Camphene, β-Myrcene, β-Pinene, δ-3-Carene, α-Terpinene, Ocimene, δ-Limonene, p-Cymene, β-Ocimene, Eucalyptol, γ-Terpinene, Terpinolene, Linalool, Isopulegol, Geraniol, β-Caryophyllene, α-Humulene, Nerolidol 1, Nerolidol 2, Guaiol, Caryophyllene Oxide, α-Bisabolol	N/A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Note: Page 1 is same on 4, 5, 6, 8 page reports

MCR Labs MA COA Page 2 Cannabinoid Testing

Table 1 - S22-14947 Flower 1027213CH-C-1 Flower Cannabinoid Testing

Analyte	Cannabinoid	Conc. (weight %)	Conc. (mg/g)	LOQ (weight %)	LOD (weight %)
CBDVA	Cannabidivarinic acid	ND	ND	0.04%	0.01%
CBDV	Cannabidivarin	ND	ND	0.04%	0.01%
CBDA	Cannabidiolic acid	ND	ND	0.04%	0.01%
CBGA	Cannabigerolic acid	0.3%	3	0.04%	0.01%
CBG	Cannabigerol	ND	ND	0.04%	0.02%
CBD	Cannabidiol	ND	ND	0.04%	0.01%
THCV	Tetrahydrocannabivarin	ND	ND	0.04%	0.01%
THCVA	Tetrahydrocannabivarinic acid	0.1%	1	0.04%	0.01%
CBCV	Cannabichromevarin	ND	ND	0.04%	0.01%
CBN	Cannabinol	ND	ND	0.04%	0.01%
CBNA	Cannabinolic acid	ND	ND	0.04%	0.01%
Δ9-THC	Δ9-Tetrahydrocannabinol	1.6%	16	0.04%	0.01%
Δ8-THC	Δ8-Tetrahydrocannabinol	ND	ND	0.04%	0.01%
CBL	Cannabicyclol	ND	ND	0.04%	0.01%
THCA	Tetrahydrocannabinolic acid	18.2%	182	0.04%	0.01%
CBC	Cannabichromene	ND	ND	0.04%	0.01%
CBCA	Cannabichromenic acid	0.2%	2	0.20%	0.02%
CBLA	Cannabicyclolic acid	ND	ND	0.04%	0.01%
CBT	Cannabicitran	ND	ND	0.04%	0.01%

Total THC = Δ9-THC + (THCA * 0.877)	17.6%	176	N/A	N/A
Total CBD = CBD + (CBDA * 0.877)	ND	ND	N/A	N/A

Note: There are no limits established by the Massachusetts Department of Public Health for cannabinoid concentrations. ND = Not Detected. LOQ = Limit of Quantitation. LOD = Limit of Detection.

2
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Note: Page 2 is same on 4, 5, 6, 8 page reports

MCR Labs MA COA Page 3 Microbial Testing Pathogen Testing

Microbiological Screen [MCR-TM-0006] *Analyst: TJS/AL* *Test Date: 22-25 Mar 22*

The sample was analyzed for microbiological contaminants via an automated Most Probable Number (MPN) methodology with cultured enrichments.

Table 2 - S22-14947 Flower 1027213CH-C-1 Flower Microbiological Testing

Test ID	Test Analysis	Results	Unit	Limits	Disposition
22-14947-AC	Total Viable Aerobic Bacteria	=2.0 x 10^3	CFU/g	10^5 CFU/g	Pass
22-14947-YM	Total Yeast and Mold	=100	CFU/g	10^4 CFU/g	Pass
22-14947-CC	Total Coliforms	<100	CFU/g	10^3 CFU/g	Pass
22-14947-EB	Total Bile-Tolerant Gram Negative Bacteria	<100	CFU/g	10^3 CFU/g	Pass

Note: CFU = colony forming unit. Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 6.

Pathogenic Bacterial Screen [MCR-TM-0012] *Analyst: JDM* *Test Date: 24 Mar 22*

The sample was analyzed for pathogenic bacterial contamination via a quantitative Polymerase Chain Reaction (qPCR).

Table 3 - S22-14947 Flower 1027213CH-C-1 Flower Pathogen Testing

Test ID	Test Analysis	Result	Units	Limits	Disposition
S22-14947-ECPT	*STEC*	Not Detected	N/A	Not Detected in 1g	Pass
S22-14947-SPT	*Salmonella*	Not Detected	N/A	Not Detected in 1g	Pass

Note: Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 6. NT = Not tested. STEC = Shiga Toxin producing E. coli

Note: Page 3 is same on 4, 5, 6, 8 page reports


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3
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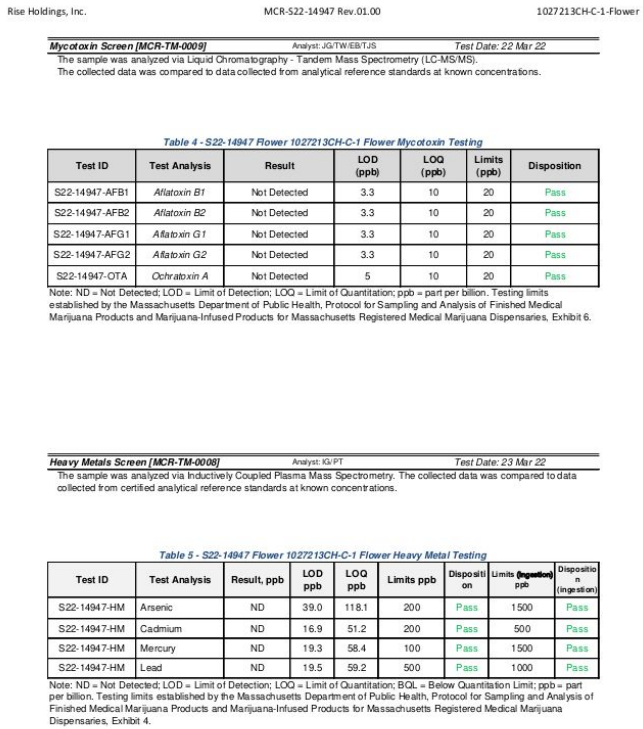
MCR Labs MA COA
Page 4
Mycotoxin Testing
Heavy Metal Testing



Rise Holdings, Inc. MCR-S22-14947 Rev.01.00 1027213CH-C-1-Flower

Mycotoxin Screen [MCR-TM-0009] Analyst: JG/TW/EB/TJS *Test Date: 22 Mar 22*

The sample was analyzed via Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS).
The collected data was compared to data collected from analytical reference standards at known concentrations.

Table 4 - S22-14947 Flower 1027213CH-C-1 Flower Mycotoxin Testing

Test ID	Test Analysis	Result	LOD (ppb)	LOQ (ppb)	Limits (ppb)	Disposition
S22-14947-AFB1	*Aflatoxin B1*	Not Detected	3.3	10	20	Pass
S22-14947-AFB2	*Aflatoxin B2*	Not Detected	3.3	10	20	Pass
S22-14947-AFG1	*Aflatoxin G1*	Not Detected	3.3	10	20	Pass
S22-14947-AFG2	*Aflatoxin G2*	Not Detected	3.3	10	20	Pass
S22-14947-OTA	*Ochratoxin A*	Not Detected	5	10	20	Pass

Note: ND = Not Detected; LOD = Limit of Detection; LOQ = Limit of Quantitation; ppb = part per billion. Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 6.

Heavy Metals Screen [MCR-TM-0008] Analyst: KJ/PT *Test Date: 23 Mar 22*

The sample was analyzed via Inductively Coupled Plasma Mass Spectrometry. The collected data was compared to data collected from certified analytical reference standards at known concentrations.

Table 5 - S22-14947 Flower 1027213CH-C-1 Flower Heavy Metal Testing

Test ID	Test Analysis	Result, ppb	LOD ppb	LOQ ppb	Limits ppb	Disposition	Limits (Ingestion) ppb	Disposition (ingestion)
S22-14947-HM	Arsenic	ND	39.0	118.1	200	Pass	1500	Pass
S22-14947-HM	Cadmium	ND	16.9	51.2	200	Pass	500	Pass
S22-14947-HM	Mercury	ND	19.3	58.4	100	Pass	1500	Pass
S22-14947-HM	Lead	ND	19.5	59.2	500	Pass	1000	Pass

Note: ND = Not Detected; LOD = Limit of Detection; LOQ = Limit of Quantitation; BQL = Below Quantitation Limit; ppb = part per billion. Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 4.

Note: Page 4 is same on 4, 5, 6, 8 page reports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MCR Labs MA COA Page 5 Pesticide Testing

Pesticides Screen [MCR-TM-0009] ***Analyst: JG/TW/EB/TJS*** *Test Date: 22 Mar 22*

The sample was analyzed via Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS).
The collected data was compared to data collected from analytical reference standards at known concentrations.

Table 6 - S22-14947 Flower 1027213CH-C-1 Flower Pesticide Testing

Test Analysis	Result, ppb	LOD ppb	LOQ ppb	Limits ppb	Disposition
Bifenazate	ND	125	375	750	Pass
Bifenthrin	ND	83.3	250	500	Pass
Cyfluthrin	ND	166.7	500	1000	Pass
Etoxazole	ND	58.3	175	350	Pass
Imazalil	ND	4.2	12.5	25	Pass
Imidacloprid	ND	50	150	300	Pass
Myclobutanil	ND	83.3	250	500	Pass
Spiromesifen	ND	333.3	1000	2000	Pass
Trifloxystrobin	ND	91.7	275	550	Pass

Note: ND = Not Detected; LOD = Limit of Detection; LOQ = Limit of Quantitation; ppb = part per billion; N/A = not available.
Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 5.

Note: Page 5 is same on 5, 6, 8 page reports


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Terpene Profile [MCR-TM-0016] Analyst: AL/JW *Test Date: 22 Mar 22*

The sample was analyzed via Gas Chromatography – Flame Ionization Detection with Headspace Autosampler. The collected data was compared to data collected from certified analytical reference standards at known concentrations.

Table 7 - S22-14947 Flower 1027213CH-C-1 Flower Terpene Testing

Terpene	Conc. (weight %)*
α-Pinene	0.06%*
Camphene	0.02%*
β-Myrcene	0.52%*
β-Pinene	0.11%*
δ 3-Carene	0.01%*
α-Terpinene	0.01%*
Ocimene	ND*
δ-Limonene	0.54%*
p-Cymene	0.01%*
β-Ocimene	0.01%*
Eucalyptol	0.14%*
γ-Terpinene	0.01%*
Terpinolene	0.02%*
Linalool	0.22%*
Isopulegol	0.01%*
Geraniol	0.01%*
β-Caryophyllene	0.48%*
α-Humulene	0.14%*
Nerolidol 1	0.01%*
Nerolidol 2	0.01%*
Guaiol	0.01%*
Caryophyllene Oxide	0.02%*
α-Bisabolol	0.02%*
Sum	2.39%*

Note: ND = Not Detected.

END OF REPORT

MCR Labs MA COA Page 6 NOTE:

Page 6 is NOT THE SAME on 6, 8 page reports

Pg 6/6 Terpenes Testing (will be parsed)

Pg 6/8 QA/QC (stop parsing at and after “QA/QC”)

QA/QC

Cannabinoid Profile [MCR-TM-0011] Analyst: KT *Test Date: 12 Nov 21*

The sample data for certified reference standards was collected at known concentrations of cannabinoids in solution.

QC-0.025 mg/mL 19 cannabinoid multi-component 10/6/2021

ID	Cannabinoid	Nominal Prep Conc (mg/mL)	Measured Conc. (mg/mL)	Recovery (%)
CBDVA	Cannabidivarinic acid	0.025	0.025	100%
CBDV	Cannabidivarin	0.025	0.027	108%
CBDA	Cannabidiolic acid	0.025	0.025	100%
CBGA	Cannabigerolic acid	0.025	0.025	100%
CBG	Cannabigerol	0.025	0.025	100%
CBD	Cannabidiol	0.025	0.025	98%
THCV	Tetrahydrocannabivarin	0.025	0.027	106%
THCVA	Tetrahydrocannabivarinic acid	0.025	0.026	104%
CBCV	Cannabichromevarin	0.025	0.027	106%
CBN	Cannabinol	0.025	0.027	108%
CBNA	Cannabinolic acid	0.025	0.025	98%
Δ9-THC	Δ9-Tetrahydrocannabinol	0.025	0.026	104%
Δ8-THC	Δ8-Tetrahydrocannabinol	0.025	0.027	108%
CBL	Cannabicyclol	0.025	0.026	104%
THCA	Tetrahydrocannabinolic acid	0.025	0.026	104%
CBC	Cannabichromene	0.025	0.028	112%
CBCA	Cannabichromenic acid	0.025	0.025	100%
CBLA	Cannabicyclolic acid	0.025	0.026	104%
CBT	Cannabicitran	0.025	0.027	108%

Criteria for successful analysis is QC recovery to be ≤20% above or below nominal.

Microbiological Screen [MCR-TM-0006] Analyst: TM/VM/NM *Test Date: 05 Nov 21*

Quality control checks are performed to confirm that the equipment used for reading incubated microbiological cultures, which are done at various concentrations, are working correctly and that the fluorescence readings are accurate. QC checks are performed within 30 days of the recorded measurements.

Date of most recent QC check: Tempo2 QC 11/05/2021
Status: Pass

MCR Labs MA COA
Page 6 of 6 page report
Terpenes Testing


```
6
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Terpene Profile [MCR-TM-0016]* Analyst: ALJW *Test Date: 22 Mar 22*

The sample was analyzed via Gas Chromatography – Flame Ionization Detection with Headspace Autosampler. The collected data was compared to data collected from certified analytical reference standards at known concentrations.

Table 7 - S22-14947 Flower 1027213CH-C-1 Flower Terpene Testing

Terpene	Conc. (weight %)*
α-Pinene	0.06%*
Camphene	0.02%*
β-Myrcene	0.52%*
β-Pinene	0.11%*
δ 3-Carene	0.01%*
α-Terpinene	0.01%*
Ocimene	ND*
δ-Limonene	0.54%*
p-Cymene	0.01%*
β-Ocimene	0.01%*
Eucalyptol	0.14%*
γ-Terpinene	0.01%*
Terpinolene	0.02%*
Linalool	0.22%*
Isopulegol	0.01%*
Geraniol	0.01%*
β-Caryophyllene	0.48%*
α-Humulene	0.14%*
Nerolidol 1	0.01%*
Nerolidol 2	0.01%*
Guaiol	0.01%*
Caryophyllene Oxide	0.02%*
α-Bisabolol	0.02%*
Sum	2.39%*

Note: ND = Not Detected.

MCR Labs MA COA Pages 6, 7 and 8 of 8 page report “QA/QC”

(currently not collected)

Pathogenic Bacterial Screen [MCR-TM-0012] *Analyst: TJS* *Test Date: 10 Nov 21*

Quality control checks are performed to validate the equipment used for reading incubated pathogenic bacterial cultures. QC checks are run with every analysis.

Date	QC Check	Pathogen	Result	Disposition
11/10/2021	Control (+)	*STEC*	Positive	Pass
11/10/2021	Control (-)	*STEC*	Negative	Pass
11/10/2021	Control (+)	*Salmonella*	Positive	Pass
11/10/2021	Control (-)	*Salmonella*	Negative	Pass

Mycotoxin Screen [MCR-TM-0009] *Analyst: TW,TJS* *Test Date: 10 Nov 21*

Solutions were spiked with toxin reference materials at given concentrations and tested for toxin presence.

QC Sample	Total Toxins (ng)	Result
Negative Control	0	Negative
Positive Control 20 ppb	20.0	Positive

Heavy Metals Screen [MCR-TM-0008] *Analyst: AI-PT* *Test Date: 07 Nov 21*

QC samples were prepared at target concentrations and injected at the end of the sequence.

Analyte	Prepared analyte concentration, ppb	Analyte measured, ppb	QC recovery (%)
Arsenic (As)	1.00	1.02	102%
Cadmium (Cd)	1.00	1	100%
Mercury (Hg)	0.50	0.51	102%
Lead (Pb)	3.00	2.91	97%

Criteria for successful analysis is QC recovery to be ≤20% above or below nominal.

Pesticides Screen [MCR-TM-0009] *Analyst: TW,TJS* *Test Date: 10 Nov 21*

QC samples were prepared at target concentrations and injected at the end of the sequence.

Test Analysis	Prepared analyte concentration, ppb	Result
Bifenazate	750	Detected
Bifenthrin	500	Detected
Cyfluthrin	1000	Detected
Etoxazole	350	Detected
Imazalil	25	Detected
Imidacloprid	300	Detected
Myclobutanil	500	Detected
Spiromesifen	2000	Detected
Trifloxystrobin	550	Detected

END OF REPORT

Cannlytics `mcrlabsma2062023.py` function `parse_mcr_pdf` returns MCR Labs MA COA Data collected as Dict{}


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CoADoc.save() saves Dict as four sheet xlsx

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parser = CoADoc()
parser.save(data, "./.datasets/lab_results/MCRLabsMA6pgReport02062023.xlsx")
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MCRLabsMA6pgReport02062023.xlsx - LibreOffice Calc

File Edit View Insert Format Styles Sheet Data Tools Window Help

Calibri 11 pt

B1:B1048576 producer

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	product_name	producer	product_type	date_tested	analysis	key	limit	lod	loq	name	serving_si	status	units	value
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6	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	cannabinoids	cbg		0.02	0.04	BG	ND		percent	1E-09
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8	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	cannabinoids	thcv		0.01	0.04	THCV	ND		percent	1E-09
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10	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	cannabinoids	cbcv		0.01	0.04	BCV	ND		percent	1E-09
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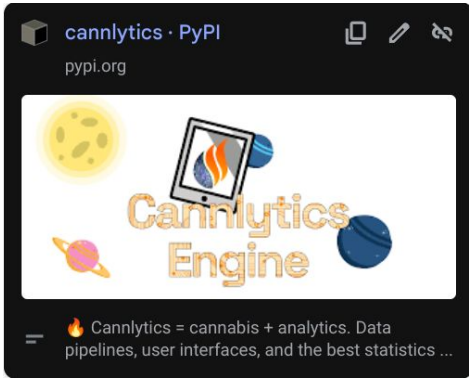
16	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	cannabinoids	thca		0.01	0.04	THCA	8.2		percent	82
17	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	cannabinoids	cbc		0.01	0.04	B	ND		percent	1E-09
18	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	cannabinoids	cbca		0.02	0.20	BCA	0.2		percent	2
19	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	cannabinoids	cbla		0.01	0.04	BLA	ND		percent	1E-09
20	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	cannabinoids	cbt		0.01	0.04	BT	ND		percent	1E-09
21	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	microbes	total_viable_aerobic_bacteria	5			Total Viable Aerobic Bacteria		Pass	CFU/g	2.0 x 103
22	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	microbes	mold	4			Total Yeast and Mold		Pass	CFU/g	100
23	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	microbes	total_coliforms	3			Total Coliforms		Pass	CFU/g	99
24	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	microbes	enterobacteriaceae	3			Total Bile-Tolerant Gram Negative Bacteria		Pass	CFU/g	99
25	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	microbes	e_coli	1E-09			STE		Pass	CFU/g	1E-09
26	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	microbes	salmonella	1E-09			Salmonella		Pass	CFU/g	1E-09
27	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	mycotoxins	aflatoxin_b1	20	3.3		0 Aflatoxin B		Pass	ppb	1E-09
28	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	mycotoxins	aflatoxin_b2	20	3.3		0 Aflatoxin B2		Pass	ppb	1E-09
29	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	mycotoxins	aflatoxin_g1	20	3.3		0 Aflatoxin G		Pass	ppb	1E-09
30	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	mycotoxins	aflatoxin_g2	20	3.3		0 Aflatoxin G2		Pass	ppb	1E-09
31	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	mycotoxins	ochratoxin_a	20	5		0 Ochratoxin A		Pass	ppb	1E-09
32	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	heavy_metals	arsenic	200	39		8 Arsenic		Pass	ppb	1E-09
33	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	heavy_metals	cadmium	200	6.9		51.2 admium		Pass	ppb	1E-09
34	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	heavy_metals	mercury	0	9.3		58.4 Mercury		Pass	ppb	1E-09
35	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	heavy_metals	lead	500	9.5		59.2 Lead		Pass	ppb	1E-09
36	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	pesticides	bifenazate	750	25		375 Bifenazate		Pass	µg/g	1E-09
37	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	pesticides	bifenthrin	500	83.3		250 Bifenthr		Pass	µg/g	1E-09
38	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	pesticides	cyfluthrin	0	66.7		500 yfluthr		Pass	µg/g	1E-09
39	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	pesticides	etoxazole	350	58.3		75 Etoxazole		Pass	µg/g	1E-09
40	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	pesticides	imazalil	25	4.2		2.5 Imazalil		Pass	µg/g	1E-09
41	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	pesticides	imidacloprid	300	50		50 Imidacloprid		Pass	µg/g	1E-09
42	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	pesticides	myclobutanil	500	83.3		250 Myclobutanil		Pass	µg/g	1E-09
43	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	pesticides	spiromesifen	2000	333.3		0 Spiromesife		Pass	µg/g	1E-09
44	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	pesticides	trifloxystrobin	550	91.7		275 Trifloxystrob		Pass	µg/g	1E-09
45	Flower	Rise Holdings, Inc.	Flower	2022-03-26T00:00:00	terpenes	alpha_pinene				α-Pinene			percent	0.06

Values Details Results Codings

Links:



[PyPI Cannlytics]

👋 Join a fun group of data scientists, cannabis enthusiasts, and many more who are interested in applying data science in the cannabis space. Wednesday at 8:30am PST / 9:30 am MT / 10:30am CDT / 11:30am EST at

https://cannlytics.com/meetup

[Cannabis Data Science Meetup]