

Kaycha Labs Oregon 540 East Vilas Road, Suite F, Central Point, OR 97502 541-668-7444 / OLCC 010-10166277B9D / www.kaychalabs.com

### **Rational Hemp** Mountain Oil Trading Info Only

Confident Cannabis ID: 2103KR0103.1051

Sample ID: M210346-01

Matrix: Tincture METRC Batch #:

Sampling Method/SOP: Client

**Date Sampled: NA** Date Accepted: 03/24/21 Harvest/Process Lot ID:

Cannabinoids

Batch ID: 2101211.80 Batch Size (g):

Harvest/Production Date:

Unit for Sale:

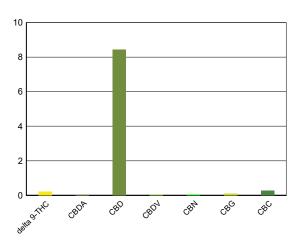
### Cannabinoid Analysis

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Date/Time Extracted: 03/24/21 12:15 Analysis Method/SOP: SOP.T.40.020 Date/Time Analyzed: 03/25/21 03:58

Cannabinoids	LOQ(%)	mg/g	% weight
Total THC ((THCA*0.8	377)+∆9THC)	2.15	0.215
Total CRD	077) 000)	94 E0	0.450

Total THC ((THCA*0.87	7)+∆9THC)	2.15	0.215
Total CBD ((CBDA*0.8	377)+CBD)	84.50	8.450
THCA	0.045	< LOQ	< LOQ
delta 9-THC	0.045	2.15	0.215
delta 8-THC	0.045	< LOQ	< LOQ
THCV	0.045	< LOQ	< LOQ
CBGA	0.045	< LOQ	< LOQ
CBDA	0.045	< LOQ	< LOQ
CBD	0.045	84.50	8.45
CBDV	0.045	0.55	0.055
CBN	0.045	0.50	0.050
CBG	0.045	1.09	0.109
CBC	0.045	2.79	0.279
THCV-A	0.045	< LOQ	< LOQ
CBDV-A	0.045	< LOQ	< LOQ
CBCA	0.045	< LOQ	< LOQ
Sum of tested	0.045	91.60	9.16



**Cannabinoid Profile** 

"Total THC" and "Total CBD" are calculated values and are an Oregon reporting requirement (OAR 333-064-0100). For Cannabinoid analysis, only delta 9-THC, THCA, CBD, CBDA are ORELAP accredited analytes. Cannabinoid values reported for plant matter are dry weight corrected; Oregon Water Activity action level is 0.65Aw and Oregon Moisture Content action level is 15%, Samples above limit will be highlighted RED; FD = Field Duplicate; LOQ = Limit of Quantitation.

Anthony Smith, Ph.D Laboratory Director - 3/31/2021

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### Kaycha Labs Oregon 540 East Vilas Road, Suite F, Central Point, OR 97502

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Rational Hemp

Mountain Oil Trading

Info Only

Sample ID: M210346-01

METRC Batch #:

Matrix: Tincture

**Date Sampled: NA** 

Date Accepted: 03/24/21

Batch ID: 2101211.80

Batch Size:

Sampling Method/SOP: Client

rix: Tincture				Sampling	Method/	SOP: Client	:		
			Terpene	Analysis					
Date/Time Extracted:	03/24/21 1	2:39		Analysis Method/SOP: SO	Analysis Method/SOP: SOP.T.40.092				
Date/Time Analyzed:	03/25/21 0	2:35							
Analyte	LOQ (mg/g	)Mass (mg/g)	Mass (%)	Analyte	LOQ (mg/	/gl)lass (mg/g)	Mass (%)		
alpha-Pinene	0.080	< LOQ	< LOQ	beta-Pinene	0.080	< LOQ	< LOQ		
Camphene	0.080	< LOQ	< LOQ	Sabinene	0.080	< LOQ	< LOQ		
Sabinene hydrate	0.080	< LOQ	< LOQ	beta-Myrcene	0.080	< LOQ	< LOQ		
p-Mentha-1,5-diene	0.080	< LOQ	< LOQ	(+)-3-Carene	0.080	< LOQ	< LOQ		
alpha-Terpinene	0.080	< LOQ	< LOQ	gamma-Terpinene	0.080	< LOQ	< LOQ		
Limonene	0.080	< LOQ	< LOQ	Eucalyptol	0.080	< LOQ	< LOQ		
Guaiol	0.080	0.108	0.0108	Terpinolene	0.080	< LOQ	< LOQ		
Linalool	0.080	< LOQ	< LOQ	Camphor	0.080	< LOQ	< LOQ		
(+)-Camphor	0.080	< LOQ	< LOQ	(-)-Camphor	0.080	< LOQ	< LOQ		
Isopulegol	0.080	< LOQ	< LOQ	Isoborneol	0.080	< LOQ	< LOQ		
Borneol	0.080	< LOQ	< LOQ	Hexahydrothymol	0.080	< LOQ	< LOQ		
Geraniol	0.080	< LOQ	< LOQ	(+)-Pulegone	0.080	< LOQ	< LOQ		
Nerol	0.080	< LOQ	< LOQ	cis-Nerolidol	0.080	< LOQ	< LOQ		
trans-Nerolidol	0.080	0.087	0.0087	Geranyl acetate	0.080	< LOQ	< LOQ		
alpha-Cedrene	0.080	< LOQ	< LOQ	trans-Caryophyllene	0.080	0.885	0.0885		
Caryophyllene Oxide	0.080	0.798	0.0798	alpha-Humulene	0.080	0.318	0.0318		
Valencene	0.080	< LOQ	< LOQ	alpha-Farnesene	0.080	< LOQ	< LOQ		
beta-Farnesene	0.080	0.209	0.0209	Cedrol	0.080	0.090	0.009		
alpha-Bisabolol	0.080	0.223	0.0223	Fenchone	0.080	< LOQ	< LOQ		
Fenchyl Alcohol	0.080	< LOQ	< LOQ	trans, beta- Ocimene	0.080	< LOQ	< LOQ		
beta, cis- Ocimene	0.080	< LOQ	< LOQ	Terpineol	0.080	0.103	0.0103		
				Total (Sum):		2.82	0.28		

Analysis performed on GCMS with confirmation ion identification. Terpene analysis is not ORELAP accredited. Results reported as wet weight, or as is. LOQ = Limit of Quantitation. Terpene analysis performed in conjuntion with EVIO Labs Portland.

Arthony Smith, Ph.D Laboratory Director - 3/31/2021



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Rational Hemp

Mountain Oil Trading

Info Only

Sample ID: M210346-01

Matrix: Tincture

METRC Batch #:

LOO Astion Lovel

**Batch Size:** 

Sampling Method/SOP: Client

#### **Pesticides**

Date/Time Extracted: 03/22/21 10:00

Date/Time Analyzed: 3/25/2021 3:38:45AM

Date Sampled: NA Date Accepted: 03/24/21

Batch ID: 2101211.80

Analysis Method/SOP: SOP.T.40.050 / SOP.T.40.051

Analyte	LOQ	Action Level	Result	Units	Туре
Abamectin	0.250	0.5	< LOQ	ppm	
Acephate	0.200	0.4	< LOQ	ppm	Organophosphate insecticide
Acequinocyl	1.00	2	< LOQ	ppm	
Acetamiprid	0.100	0.2	< LOQ	ppm	Neonicotinoid instecticide
Aldicarb	0.200	0.4	< LOQ	ppm	Carbamate insecticide
Azoxystrobin	0.100	0.2	< LOQ	ppm	
Bifenazate	0.100	0.2	< LOQ	ppm	Unclassified insecticide
Bifenthrin	0.100	0.2	< LOQ	ppm	
Boscalid	0.200	0.4	< LOQ	ppm	Anilide fungicide
Carbaryl	0.100	0.2	< LOQ	ppm	Carbamate insecticide
Carbofuran	0.100	0.2	< LOQ	ppm	Carbamate insecticide
Chlorantraniliprole	0.100	0.2	< LOQ	ppm	Anthranilic diamide insecticide
Chlorfenapyr	0.500	1	< LOQ	ppm	Pyrazole insecticide
Chlorpyrifos	0.100	0.2	< LOQ	ppm	Organophosphate insecticide
Clofentezine	0.100	0.2	< LOQ	ppm	
Cyfluthrin	0.500	1	< LOQ	ppm	
Cypermethrin	0.500	1	< LOQ	ppm	
Daminozide	0.500	1	< LOQ	ppm	
DDVP (Dichlorvos)	0.500	1	< LOQ	ppm	
Diazinon	0.100	0.2	< LOQ	ppm	Organophosphate insecticide
Dimethoate	0.100	0.2	< LOQ	ppm	
Ethoprophos	0.100	0.2	< LOQ	ppm	
Etofenprox	0.200	0.4	< LOQ	ppm	
Etoxazole	0.100	0.2	< LOQ	ppm	Unclassified miticide
Fenoxycarb	0.100	0.2	< LOQ	ppm	
Fenpyroximate	0.200	0.4	< LOQ	ppm	
Fipronil	0.200	0.4	< LOQ	ppm	Pyrazole insecticide
Flonicamid	0.500	1	< LOQ	ppm	Pyridinecarboxamide insecticide
Fludioxonil	0.200	0.4	< LOQ	ppm	non-systemic fungicide
Hexythiazox	0.500	1	< LOQ	ppm	
Imazalil	0.100	0.2	< LOQ	ppm	Azole fungicide
Imidacloprid	0.200	0.4	< LOQ	ppm	Neonicotinoid insectide
Kresoxim-methyl	0.200	0.4	< LOQ	ppm	
Malathion	0.100	0.2	< LOQ	ppm	
Metalaxyl	0.100	0.2	< LOQ	ppm	
Methiocarb	0.100	0.2	< LOQ	ppm	Carbamate insecticide
Methomyl	0.200	0.4	< LOQ	ppm	Carbamate insecticide

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Rational Hemp

Mountain Oil Trading

Info Only

Sample ID: M210346-01 Matrix: Tincture

Date Sampled: NA

Date Accepted: 03/24/21

Batch ID: 2101211.80

**Batch Size:** 

Sampling Method/SOP: Client

#### **Pesticides**

METRC Batch #:

Date/Time Extracted: 03/22/21 10:00

Date/Time Analyzed: 3/25/2021 2:29:19AM

Analysis Method/SOP: SOP.T.40.050 / SOP.T.40.051

Analyte	LOQ	Action Level	Result	Units	Туре
Methyl parathion	0.100	0.2	< LOQ	ppm	
MGK-264	0.100	0.2	< LOQ	ppm	
Myclobutanil	0.100	0.2	< LOQ	ppm	Azole fungicide
Naled	0.250	0.5	< LOQ	ppm	
Oxamyl	0.500	1	< LOQ	ppm	Carbamate insecticide
Paclobutrazol	0.200	0.4	< LOQ	ppm	Azole plant growth regulator
Permethrins	0.100	0.2	< LOQ	ppm	
Phosmet	0.100	0.2	< LOQ	ppm	Organophosphate insecticide
Piperonyl butoxide	1.00	2	< LOQ	ppm	
Prallethrin	0.100	0.2	< LOQ	ppm	
Propiconazole	0.200	0.4	< LOQ	ppm	
Propoxur	0.100	0.2	< LOQ	ppm	Carbamate insecticide
Pyrethrins	0.500	1	< LOQ	ppm	
Pyridaben	0.100	0.2	< LOQ	ppm	Unclassified insecticide
Spinosad	0.100	0.2	< LOQ	ppm	Spinosyn insecticide
Spiromesifen	0.100	0.2	< LOQ	ppm	Keto-enol insecticide
Spirotetramat	0.100	0.2	< LOQ	ppm	Keto-enol insecticide
Spiroxamine	0.200	0.4	< LOQ	ppm	Unclassified fungicide
Tebuconazole	0.200	0.4	< LOQ	ppm	
Thiacloprid	0.100	0.2	< LOQ	ppm	
Thiamethoxam	0.100	0.2	< LOQ	ppm	Neonicotinoid insectide
Trifloxystrobin	0.100	0.2	< LOQ	ppm	Strobin fungicide

Results above the action level fail Oregon state testing requirements and will be highlighted RED.

LOQ= Limit of Quantitation; PPM= Parts per million; ND= Not detected; NT= Not tested; AC= Above calibration range. PASS/FAIL status based on OAR 333-007.



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Sample ID: M210346-01 METRC Batch #:

Matrix: Tincture

Date Sampled: NA

Date Accepted: 03/24/21

Batch ID: 2101211.80

**Batch Size:** 

Sampling Method/SOP: Client

matrix. Thiotare					
		R	esidual S	Solvents	
Analyte	LOQ	Action Level	Result	Units	Date/Time Extracted: 03/25/21 15:23
Butanes	2500	5000 3	< LOQ	ppm	Date/Time Analyzed: 03/26/21 11:46
n-Butane	1250	5000	< LOQ	ppm	Analysis Method/SOP: SOP.T.40.031
iso-Butane	1250	5000	< LOQ	ppm	Analysis Welliod/30F. 301 .1.40.031
Hexanes	145	290 4	< LOQ	ppm	3 - Total butanes are calculated as
n-Hexane	145	290	< LOQ	ppm	sum of n-butanes (CAS# 106-97-8)
2-Methylpentane	145	290	< LOQ	ppm	and iso-butane (CAS# 75-28-5)
3-Methylpentane	145	290	< LOQ	ppm	(
2,2-Dimethylbutane	145	290	< LOQ	ppm	4 - Total hexanes are calculated as
2,3-Dimethylbutane	145	290	< LOQ	ppm	sum of n-hexane (CAS# 110-54-3),
Pentanes	2500	5000 5	< LOQ	ppm	2-methylpentane (CAS# 107-83-5),
n-Pentane	833.33	5000	< LOQ	ppm	3-methylpentane (CAS# 96-14-0),
iso-Pentane	833.33	5000	< LOQ	ppm	2,2-dimethylbutane (CAS# 75-83-2),
Neopentane	833.33	5000	< LOQ	ppm	2,3-dimethylbutane (CAS# 79-29-8)
Xylenes	1085	2170	< LOQ	ppm	2,3-diffethybutarie (CA3# 79-29-6)
1,2-Dimethylbenzene	271.25	2170	< LOQ	ppm	F. Total maintaines are calculated as
1,3-Dimethylbenzene	271.25	2170	< LOQ	ppm	5 - Total pentanes are calculated as
1,4-Dimethylbenzene	271.25	2170	< LOQ	ppm	sum of n-pentane (CAS# 109-66-0),
Xylenes MP	1085	2170	< LOQ	ppm	iso-pentane (CAS# 78-78-4),
Ethyl benzene	271.25	NA	< LOQ	ppm	and neo-pentane (CAS# 463-82-1)
2-Propanol (IPA)	2500	5000	< LOQ	ppm	
Acetone	2500	5000	< LOQ	ppm	<ul><li>6 - Total xylenes are calculated as</li></ul>
Acetonitrile	205	410	< LOQ	ppm	1,2-dimethylbenzene (CAS# 95-47-6),
Benzene	1	2	< LOQ	ppm	1,3-dimethylbenzene (CAS# 106-42-3),
Methanol	1500	3000	< LOQ	ppm	and 1-4-dimethylbenzene (CAS# 106-42-3)
Propane	2500	5000	< LOQ	ppm	
Toluene	445	890	< LOQ	ppm	<ul><li>7 - Ethanol is not regulated under</li></ul>
Dichloromethane	300	600	< LOQ	ppm	OAR-333-007-0410.
1,4-Dioxane	190	380	< LOQ	ppm	
2-Butanol	2500	5000	< LOQ	ppm	TIC - Tentatively Identified Compound not
2-Ethoxyethanol	80	160	< LOQ	ppm	regulated under OAR-333-007-0410
Cumene	35	70	< LOQ	ppm	•
Cyclohexane	1940	3880	< LOQ	ppm	
Ethyl acetate	2500	5000	< LOQ	ppm	
Ethyl ether	2500	5000	< LOQ	ppm	
Ethylene glycol	310	620	< LOQ	ppm	
Ethylene oxide	25	50	< LOQ	ppm	
Heptane	2500	5000	< LOQ	ppm	
Isopropyl acetate	2500	5000	< LOQ	ppm	
Tetrahydrofuran	360	720	< LOQ	ppm	
Ethanol	500	NA 7	< LOQ	ppm	

Results above the action level fail Oregon state testing requirements and will be highlighted RED. LOQ=Limit of Quantitation; PPM=Parts per million; ND=Not detected; NT=Not tested; AC=Above calibration range. PASS/FAIL status based on OAR 333-007. Analysis performed in conjunction

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Anthony Smith, Ph.D Laboratory Director - 3/31/2021



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Rational Hemp

Mountain Oil Trading

Info Only

Sample ID: M210346-01

Matrix: Tincture

Date Sampled: NA

Date Accepted: 03/24/21

Batch ID: 2101211.80

**Batch Size:** 

Analysis Method/SOP: SOP.T.40.046

Sampling Method/SOP: Client

#### **Aerobic Plate Count**

Date/Time Extracted: 03/29/21 11:48

Date/Time Analyzed: 03/29/21 11:49

Total Colonies:

< LOQ

CFU/q

METRC Batch #:

#### About Your Aerobic Plate Count (APC) Results

An aerobic plate count is a measure of the amount of bacteria in a sample that is capable of living in an oxygenated environment.

The American Herbal Pharmacoepia recommends herbal products contain no greater than 100,000 CFU/g of total viable aerobic bacteria. For  $CO_2$  and solvent based extracts, the AHP recommends a limit of no greater than 10,000 CFU/g. LOQ for this assay is 100 CFU/g

Aerobic plate count is commonly applied to finish products, particularly foods. Traditionally manufacturers will monitor products for aerobic bacteria on a routine basis to ensure that the microbial load of a product is not increasing.

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Rational Hemp

Mountain Oil Trading

Info Only

Sample ID: M210346-01

METRC Batch #:

Matrix: Tincture

**Date Sampled: NA** 

Date Accepted: 03/24/21

Batch ID: 2101211.80

**Batch Size:** 

Sampling Method/SOP: Client

#### Yeast and Mold Enumeration

Date/Time Extracted: 03/31/21 11:45

Analysis Method/SOP: \*\*\* DEFAULT SPECIEIC

Date/Time Analyzed: 03/31/21 11:46

Total Yeast and Mold Colonies <LOQ cfu/g

#### **About Your Yeast and Mold Results**

Botanical materials often have total yeast and mold counts between 1,500 - 7,500 CFU/g. Products that have undergone exposure to solvents, such as alcohol tinctures or concentrated materials extracted with butane, propane, hexane, carbon dioxide, or other organic solvents will typically feature total yeast and mold counts at 0 CFU/g.

The American Herbal Pharmacoepia recommends herbal products contain no greater than 10,000 CFU/g of total yeasts and molds. Results above 10,000 CFU/g will be highlighted Red. Counts greater than 25,000 CFU/ g are designated as "TNTC" or "Too numerous to count." LOQ for this assay is 100 CFU/g.

#### Yeasts vs Molds

Yeasts and molds are both broad types of fungi. Yeasts are unicellular and reproduce by budding, creating a small smooth apperance, whereas molds are multicellular and grow through fungal strands called hyphae, creating a fuzzy appearance often associated with mold.

Yeasts and molds are commonly found on natural products, and not all are harmful. Nevertheless, yeasts and molds, as well as their spores, can cause lung irritation, facilitate allergic reactions, or even present life-threatening conditions for immuno-compromised consumers. For instance, the dark mold, Aspergillus, can produce toxic chemical byproducts which can be harmful to human health. Aspergillus spores can lodge in small crevaces in the lungs and grow, leading to a potentially life-threatening condition called Aspergillosis.

A simple total yeast and mold count can be a great way to monitor for potential health hazards in botanical products and help ensure the safety of consumers.

Anthony Smith, Ph.D. Laboratory Director - 3/31/2021



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# **Quality Control**

Batch: M21C069 - SOP.T.30.060 Pesticide Prep

Blank(M21C069-BLK1)		Ex	ctracted: 03/2	2/21 10:00	Analyzed: 03/24		
Analyte	Result	LOQ	Recovery Limits	Analyte	Result	LOQ	Recovery Limits
Methyl parathion	< LOQ	0.100 (ppm)	< LOQ	MGK-264	< LOQ	0.100 (ppm)	< LOQ
Chlorfenapyr	< LOQ	0.500 (ppm)	< LOQ	Cyfluthrin	< LOQ	0.500 (ppm)	< LOQ
Cypermethrin	< LOQ	0.500 (ppm)	< LOQ	Abamectin	< LOQ	0.250 (ppm)	< LOQ
Acephate	< LOQ	0.200 (ppm)	< LOQ	Acequinocyl	< LOQ	1.00 (ppm)	< LOQ
Acetamiprid	< LOQ	0.100 (ppm)	< LOQ	Aldicarb	< LOQ	0.200 (ppm)	< LOQ
zoxystrobin	< LOQ	0.100 (ppm)	< LOQ	Bifenazate	< LOQ	0.100 (ppm)	< LOQ
ifenthrin	< LOQ	0.100 (ppm)	< LOQ	Boscalid	< LOQ	0.200 (ppm)	< LOQ
Carbaryl	< LOQ	0.100 (ppm)	< LOQ	Carbofuran	< LOQ	0.100 (ppm)	< LOQ
Chlorantraniliprole	< LOQ	0.100 (ppm)	< LOQ	Chlorpyrifos	< LOQ	0.100 (ppm)	< LOQ
Clofentezine	< LOQ	0.100 (ppm)	< LOQ	Daminozide	< LOQ	0.500 (ppm)	< LOQ
DVP (Dichlorvos)	< LOQ	0.500 (ppm)	< LOQ	Diazinon	< LOQ	0.100 (ppm)	< LOQ
imethoate	< LOQ	0.100 (ppm)	< LOQ	Ethoprophos	< LOQ	0.100 (ppm)	< LOQ
tofenprox	< LOQ	0.200 (ppm)	< LOQ	Etoxazole	< LOQ	0.100 (ppm)	< LOQ
enoxycarb	< LOQ	0.100 (ppm)	< LOQ	Fenpyroximate	< LOQ	0.200 (ppm)	< LOQ
pronil	< LOQ	0.200 (ppm)	< LOQ	Flonicamid	< LOQ	0.500 (ppm)	< LOQ
ludioxonil	< LOQ	0.200 (ppm)	< LOQ	Hexythiazox	< LOQ	0.500 (ppm)	< LOQ
nazalil	< LOQ	0.100 (ppm)	< LOQ	Imidacloprid	< LOQ	0.200 (ppm)	< LOQ
resoxim-methyl	< LOQ	0.200 (ppm)	< LOQ	Malathion	< LOQ	0.100 (ppm)	< LOQ
letalaxyl	< LOQ	0.100 (ppm)	< LOQ	Methiocarb	< LOQ	0.100 (ppm)	< LOQ
lethomyl	< LOQ	0.200 (ppm)	< LOQ	Myclobutanil	< LOQ	0.100 (ppm)	< LOQ
laled	< LOQ	0.250 (ppm)	< LOQ	Oxamyl	< LOQ	0.500 (ppm)	< LOQ
aclobutrazol	< LOQ	0.200 (ppm)	< LOQ	Permethrins	< LOQ	0.100 (ppm)	< LOQ
hosmet	< LOQ	0.100 (ppm)	< LOQ	Piperonyl butoxide	< LOQ	1.00 (ppm)	< LOQ
rallethrin	< LOQ	0.100 (ppm)	< LOQ	Propiconazole	< LOQ	0.200 (ppm)	< LOQ
ropoxur	< LOQ	0.100 (ppm)	< LOQ	Pyridaben	< LOQ	0.100 (ppm)	< LOQ
yrethrins	< LOQ	0.500 (ppm)	< LOQ	Spinosad	< LOQ	0.100 (ppm)	< LOQ
piromesifen	< LOQ	0.100 (ppm)	< LOQ	Spirotetramat	< LOQ	0.100 (ppm)	< LOQ
piroxamine	< LOQ	0.200 (ppm)	< LOQ	Tebuconazole	< LOQ	0.200 (ppm)	< LOQ
hiacloprid	< LOQ	0.100 (ppm)	< LOQ	Thiamethoxam	< LOQ	0.100 (ppm)	< LOQ
rifloxystrobin	< LOQ	0.100 (ppm)	< LOQ				

LCS(M21C069-BS1)		Ex	ctracted: 03/2	2/21 10:00	<b>Analyzed:</b> 03/24/2		
Analyte	% Recovery	LOQ	Recovery Limits	Analyte	% Recovery	LOQ	Recovery Limits
Methyl parathion	110	0.100 (ppm)	50-150	MGK-264	128	0.100 (ppm)	50-150
Chlorfenapyr	128	0.500 (ppm)	50-150	Cyfluthrin	113	0.500 (ppm)	50-150
Cypermethrin	121	0.500 (ppm)	50-150	Abamectin	66.6	0.250 (ppm)	50-150
Acephate	81.6	0.200 (ppm)	50-150	Acequinocyl	85.2	1.00 (ppm)	50-150

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### Kaycha Labs Oregon 540 East Vilas Road, Suite F, Central Point, OR 97502 541-668-7444 / OLCC 010-10166277B9D / www.kaychalabs.com

# **Quality Control**

Batch: M21C069 - SOP.T.30.060 Pesticide Prep (Continued)

LCS(M21C069-BS1)		Ex	ktracted: 03/2	2/21 10:00	Analyzed: 03/24/		
•	•	Recovery					Recovery
Analyte	% Recovery	LOQ	Limits	Analyte	% Recovery	LOQ	Limits
Acetamiprid	120	0.100 (ppm)	50-150	Aldicarb	64.1	0.200 (ppm)	50-150
Azoxystrobin	86.1	0.100 (ppm)	50-150	Bifenazate	74.2	0.100 (ppm)	50-150
Bifenthrin	73.1	0.100 (ppm)	50-150	Boscalid	97.8	0.200 (ppm)	50-150
Carbaryl	113	0.100 (ppm)	50-150	Carbofuran	94.2	0.100 (ppm)	50-150
Chlorantraniliprole	72.7	0.100 (ppm)	50-150	Chlorpyrifos	77.1	0.100 (ppm)	50-150
Clofentezine	104	0.100 (ppm)	50-150	Daminozide	151	0.500 (ppm)	50-150
DDVP (Dichlorvos)	77.5	0.500 (ppm)	50-150	Diazinon	84.7	0.100 (ppm)	50-150
Dimethoate	95.1	0.100 (ppm)	50-150	Ethoprophos	104	0.100 (ppm)	50-150
tofenprox	89.7	0.200 (ppm)	50-150	Etoxazole	73.6	0.100 (ppm)	50-150
enoxycarb	79.2	0.100 (ppm)	50-150	Fenpyroximate	71.1	0.200 (ppm)	50-150
ipronil	88.6	0.200 (ppm)	50-150	Flonicamid	81.0	0.500 (ppm)	50-150
ludioxonil	99.9	0.200 (ppm)	50-150	Hexythiazox	70.5	0.500 (ppm)	50-150
mazalil	75.8	0.100 (ppm)	50-150	Imidacloprid	88.8	0.200 (ppm)	50-150
resoxim-methyl	107	0.200 (ppm)	50-150	Malathion	94.4	0.100 (ppm)	50-150
Metalaxyl	90.3	0.100 (ppm)	50-150	Methiocarb	87.4	0.100 (ppm)	50-150
<b>l</b> ethomyl	84.2	0.200 (ppm)	50-150	Myclobutanil	76.4	0.100 (ppm)	50-150
laled	123	0.250 (ppm)	50-150	Oxamyl	85.6	0.500 (ppm)	50-150
aclobutrazol	87.7	0.200 (ppm)	50-150	Permethrins		0.100 (ppm)	50-150
Phosmet	97.0	0.100 (ppm)	50-150	Piperonyl butoxide	74.4	1.00 (ppm)	50-150
rallethrin	78.4	0.100 (ppm)	50-150	Propiconazole	69.0	0.200 (ppm)	50-150
Propoxur	93.4	0.100 (ppm)	50-150	Pyridaben	64.3	0.100 (ppm)	50-150
yrethrins	78.9	0.500 (ppm)	50-150	Spinosad	72.7	0.100 (ppm)	50-150
piromesifen	69.6	0.100 (ppm)	50-150	Spirotetramat	85.6	0.100 (ppm)	50-150
piroxamine	86.9	0.200 (ppm)	50-150	Tebuconazole	80.0	0.200 (ppm)	50-150
hiacloprid	60.8	0.100 (ppm)	50-150	Thiamethoxam	104	0.100 (ppm)	50-150
rifloxystrobin	92.6	0.100 (ppm)	50-150				

Batch: M21C081 - SOP.T.30.050 Prep for Cannabinoids

Blank(M21C08	1-BLK1)	E	xtracted: 03/2	4/21 12:15	Analyzed: 03/25	Analyzed: 03/25/21 02:20		
Analyte	Result	LOQ	Recovery Limits	Analyte	Result	LOQ	Recovery Limits	
HCA	< LOQ	0.040 (%)	< LOQ	delta 9-THC	< LOQ	0.040 (%)	< LOQ	
elta 8-THC	< LOQ	0.040 (%)	< LOQ	THCV-A	< LOQ	0.040 (%)	< LOQ	
HCV	< LOQ	0.040 (%)	< LOQ	CBDA	< LOQ	0.040 (%)	< LOQ	
BD	< LOQ	0.040 (%)	< LOQ	CBDV-A	< LOQ	0.040 (%)	< LOQ	
BDV	< LOQ	0.040 (%)	< LOQ	CBG	< LOQ	0.040 (%)	< LOQ	
BGA	< LOQ	0.040 (%)	< LOQ	CBN	< LOQ	0.040 (%)	< LOQ	
BCA	< LOQ	0.040 (%)	< LOQ	CBC	< LOQ	0.040 (%)	< LOQ	

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## **Quality Control**

Batch: M21C081 - SOP.T.30.050 Prep for Cannabinoids (Continued)

Blank(M21C081-BLK1)		E	xtracted: 03/24	1/21 12:15	Analyzed: 03/25/2		
		Recovery				Recovery	
Analyte	Result	LOQ	Limits	Analyte	Result	LOQ	Limits
Sum of tested Cannabinoids	<1.00	0.040 (%)	< LOQ				

LCS(M21C081-BS1)			Extracted: 03/2	4/21 12:15	Analyzed: 03/25/21		
Analyte	% Recovery	LOQ	Recovery Limits	Analyte	% Recovery	LOQ	Recovery Limits
THCA	94.6	(%)	70-130	delta 9-THC	98.0	(%)	70-130
THCV	107	(%)	70-130	CBDA	98.5	(%)	70-130
CBD	98.0	(%)	70-130	CBG	96.5	(%)	70-130
CBGA	98.6	(%)	70-130	CBN	107	(%)	70-130
CBCA	103	(%)	70-130	CBC	88.5	(%)	70-130

Batch: M21C082 - SOP.T.40.092 PDX Terpenoid Analysis via GC-MS

Blank(M21C082-BLK1)		Extracted: 03/24/21 12:39			Analyzed: 03/24/21 17:02		
Analyte	Result	LOQ	Recovery Limits	Analyte	Result	LOQ	Recovery Limits
alpha-Pinene	< LOQ	0.200 (mg/g)	< LOQ	beta-Pinene	< LOQ	0.200 (mg/g)	< LOQ
Camphene	< LOQ	0.200 (mg/g)	< LOQ	Sabinene	< LOQ	0.200 (mg/g)	< LOQ
Sabinene hydrate	< LOQ	0.200 (mg/g)	< LOQ	beta-Myrcene	< LOQ	0.200 (mg/g)	< LOQ
-Mentha-1,5-diene	< LOQ	0.200 (mg/g)	< LOQ	(+)-3-Carene	< LOQ	0.200 (mg/g)	< LOQ
lpha-Terpinene	< LOQ	0.200 (mg/g)	< LOQ	gamma-Terpinene	< LOQ	0.200 (mg/g)	< LOQ
imonene	< LOQ	0.200 (mg/g)	< LOQ	Eucalyptol	< LOQ	0.200 (mg/g)	< LOQ
Guaiol	< LOQ	0.200 (mg/g)	< LOQ	Terpinolene	< LOQ	0.200 (mg/g)	< LOQ
inalool	< LOQ	0.200 (mg/g)	< LOQ	Camphor	< LOQ	0.200 (mg/g)	< LOQ
-)-Camphor	< LOQ	0.200 (mg/g)	< LOQ	(-)-Camphor	< LOQ	0.200 (mg/g)	< LOQ
opulegol	< LOQ	0.200 (mg/g)	< LOQ	Isoborneol	< LOQ	0.200 (mg/g)	< LOQ
orneol	< LOQ	0.200 (mg/g)	< LOQ	Hexahydrothymol	< LOQ	0.200 (mg/g)	< LOQ
eraniol	< LOQ	0.200 (mg/g)	< LOQ	(+)-Pulegone	< LOQ	0.200 (mg/g)	< LOQ
erol	< LOQ	0.200 (mg/g)	< LOQ	cis-Nerolidol	< LOQ	0.200 (mg/g)	< LOQ
ans-Nerolidol	< LOQ	0.200 (mg/g)	< LOQ	Geranyl acetate	< LOQ	0.200 (mg/g)	< LOQ
pha-Cedrene	< LOQ	0.200 (mg/g)	< LOQ	trans-Caryophyllene	< LOQ	0.200 (mg/g)	< LOQ
aryophyllene Oxide	< LOQ	0.200 (mg/g)	< LOQ	alpha-Humulene	< LOQ	0.200 (mg/g)	< LOQ
alencene	< LOQ	0.200 (mg/g)	< LOQ	alpha-Farnesene	< LOQ	0.200 (mg/g)	< LOQ
eta-Farnesene	< LOQ	0.200 (mg/g)	< LOQ	Cedrol	< LOQ	0.200 (mg/g)	< LOQ
pha-Bisabolol	< LOQ	0.200 (mg/g)	< LOQ	Fenchone	< LOQ	0.200 (mg/g)	< LOQ
enchyl Alcohol	< LOQ	0.200 (mg/g)	< LOQ	trans, beta- Ocimene	< LOQ	0.200 (mg/g)	< LOQ
eta, cis- Ocimene	< LOQ	0.200 (mg/g)	< LOQ	Terpineol	< LOQ	0.200 (mg/g)	< LOQ

Batch: M21C090 - SOP.T.40.031 Solvents

Blank(M21C090-BLK1)			Extracted: 03/2	5/21 15:23	<b>Analyzed:</b> 03/26/2		
			Recovery				Recovery
Analyte	Result	LOQ	Limits	Analyte	Result	LOQ	Limits

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# **Quality Control**

Batch: M21C090 - SOP.T.40.031 Solvents (Continued)

Blank(M21C090-BLK1)		Extracted: 03/25/21 15:23			Analyzed: 03/26/21 08:59		
,		Recovery				Recovery	
Analyte	Result	LOQ	Limits	Analyte	Result	LOQ	Limits
Butanes	< LOQ	2500 (ppm)	< LOQ	n-Butane	< LOQ	1250 (ppm)	< LOQ
iso-Butane	< LOQ	1250 (ppm)	< LOQ	Hexanes	< LOQ	145 (ppm)	< LOQ
n-Hexane	< LOQ	145 (ppm)	< LOQ	2-Methylpentane	< LOQ	145 (ppm)	< LOQ
3-Methylpentane	< LOQ	145 (ppm)	< LOQ	2,2-Dimethylbutane	< LOQ	145 (ppm)	< LOQ
2,3-Dimethylbutane	< LOQ	145 (ppm)	< LOQ	Pentanes	< LOQ	2500 (ppm)	< LOQ
n-Pentane	< LOQ	833.33 (ppm)	< LOQ	iso-Pentane	< LOQ	833.33 (ppm)	< LOQ
Neopentane	< LOQ	833.33 (ppm)	< LOQ	Xylenes	< LOQ	1085 (ppm)	< LOQ
1,2-Dimethylbenzene	< LOQ	271.25 (ppm)	< LOQ	1,3-Dimethylbenzene	< LOQ	271.25 (ppm)	< LOQ
1,4-Dimethylbenzene	< LOQ	271.25 (ppm)	< LOQ	Xylenes MP	< LOQ	1085 (ppm)	< LOQ
Ethyl benzene	< LOQ	271.25 (ppm)	< LOQ	2-Propanol (IPA)	< LOQ	2500 (ppm)	< LOQ
Acetone	<loq< td=""><td>2500 (ppm)</td><td>&lt; LOQ</td><td>Acetonitrile</td><td>&lt; LOQ</td><td>205 (ppm)</td><td>&lt; LOQ</td></loq<>	2500 (ppm)	< LOQ	Acetonitrile	< LOQ	205 (ppm)	< LOQ
Benzene	< LOQ	1 (ppm)	< LOQ	Methanol	< LOQ	1500 (ppm)	< LOQ
Propane	< LOQ	2500 (ppm)	< LOQ	Toluene	< LOQ	445 (ppm)	< LOQ
Dichloromethane	< LOQ	300 (ppm)	< LOQ	1,4-Dioxane	< LOQ	190 (ppm)	< LOQ
2-Butanol	< LOQ	2500 (ppm)	< LOQ	2-Ethoxyethanol	< LOQ	80 (ppm)	< LOQ
Cumene	< LOQ	35 (ppm)	< LOQ	Cyclohexane	< LOQ	1940 (ppm)	< LOQ
Ethyl acetate	< LOQ	2500 (ppm)	< LOQ	Ethyl ether	< LOQ	2500 (ppm)	< LOQ
Ethylene glycol	< LOQ	310 (ppm)	< LOQ	Ethylene oxide	< LOQ	25 (ppm)	< LOQ
Heptane	< LOQ	2500 (ppm)	< LOQ	Isopropyl acetate	< LOQ	2500 (ppm)	< LOQ
Tetrahydrofuran	< LOQ	360 (ppm)	< LOQ	Ethanol	< LOQ	500 (ppm)	< LOQ

Batch: M21C100 - SOP.T.40.046 Aerobic Bacteria Count

Blank(M21C100-BLK1)		E	xtracted: 03/29	9/21 11:48	Analyzed: 03/29/2		
Analyte	Result	LOQ	Recovery Limits	Analyte	Result	LOQ	Recovery Limits
Aerobic Bacteria	< LOQ	1.00 (cfu/a)	< LOQ				

Batch: M21C111 - SOP.T.40.040 Yeast/Mold

Blank(M21C111-BLK	Extracted: 03/31/21 11:45			Analyzed: 03/31/2			
Analyte	Result	LOQ	Recovery Limits	Analyte	Result	LOQ	Recovery Limits
Total Yeast and Mold Coloni	0.00	(cfu/g)	< LOQ				

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