

CERTIFICATE OF ANALYSIS




Juniper Analytics, LLC
 1334 NE 2nd Street, Bend, OR, 97701
 541.382.3796
 ORELAP: 4101 / OLCC: 010-10035537931

Client Name: Specialty Cannabinoids
 Contact Info: Brandon
 Sample Type: Extract
 External Batch ID: 5159
 Harvest/Prod. Date: 2019-12-01
 Sample ID: CRD
 METRC ID: Industrial Hemp
 Juniper Batch #: 19JA3184.03
 Intake Date: 2019-12-03

NOT FOR COMPLIANCE

Sample not sampled per
 OAR 333-064-0100

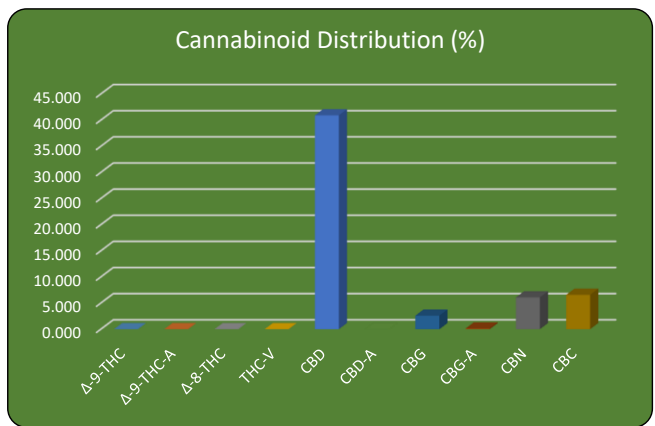


Potency Analysis (Oregon Compliance Standard OAR 333-007-0430)

ANALYSIS DATE: 2019-12-03

Compound	Weight (%)	Concentration (mg/g)	LOQ* (mg/g)
Δ-9-THC	< LOQ	< LOQ	1.00
Δ-9-THC-A	< LOQ	< LOQ	1.00
Δ-8-THC	< LOQ	< LOQ	1.00
THC-V	< LOQ	< LOQ	1.00
CBD	40.914	409.14	1.00
CBD-A	< LOQ	< LOQ	1.00
CBG	2.592	25.92	1.00
CBG-A	0.133	1.33	1.00
CBN	6.088	60.88	1.00
CBC	6.572	65.72	1.00

Instrument: HPLC/DAD
 Method: JA-Potency-Proprietary



TOTAL THC/CBD	Weight (%)	Conc (mg/g)
THC Total =	<LOQ	<LOQ

THC_{Total} = (THC-A * 0.877) + Δ9THC

CBD Total =	40.914	409.14
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CBD_{Total} = (CBD-A * 0.877) + CBD

* < LOQ - Less than the Limit of Quantification

Residual Solvent Analysis (Oregon Compliance Standard OAR 333-007-0410)

ANALYSIS DATE: Not Tested

Solvent	Result (ppm)	Action Level / LOQ (ppm)
1,4-Dioxane		380 / 100
2-Butanol		5000 / 500
2-Ethoxyethanol		160 / 100
2-Propanol (IPA)		5000 / 500
Acetone		5000 / 500
Acetonitrile		410 / 100
Benzene		2 / 1
Cumene		70 / 50
Cyclohexane		3880 / 500
Dichloromethane		600 / 100
Ethyl acetate		5000 / 500
Ethyl ether		5000 / 500
Ethylene glycol		620 / 300
Ethylene oxide		50 / 10
Heptane		5000 / 500
Isopropyl acetate		5000 / 500
Methanol		3000 / 500
Propane		5000 / 500
Tetrahydrofuran		720 / 100
Toluene		890 / 100

Instrument: GC/MS Method: USP 467 - Modified

Solvent	Result (ppm)	Action Level / LOQ (ppm)
Pentanes;		5000 / 500
-n-pentane		**
-iso-pentane		**
-neo-pentane		**
Butanes;		5000 / 500
-n-butane		**
-iso-butane		**
Hexanes;		290 / 50
-n-hexane		**
-2-methylpentane		**
-3-methylpentane		**
-2,2-dimethylbutane		**
-2,3-dimethylbutane		**
Xylenes;		2170 / 300
-1,2-dimethylbenzene		**
-1,3-dimethylbenzene		**
-1,4-dimethylbenzene		**
-Ethyl benzene		**

**Limit based on combined results

Residual Solvents N/A

Tentatively Identified Compounds: N/A

<LOQ - Less than the Limit of Quantification

APPROVAL

Report amended with corrected potency values

Report Date: 2019-12-05

QA Review



Juniper Batch #:	19JA3184.03
Intake Date:	2019-12-03

Pesticide Analysis (Oregon Compliance Standard OAR 333-007-0400)

ANALYSIS DATE: Not Tested			Instrument: LC/MS/MS		Method: AOAC 2007.1-Mod	
Pesticide	Result (ppm)	Action Level / LOQ (ppm)		Pesticide	Result (ppm)	Action Level / LOQ (ppm)
Abamectin		0.5 / 0.25		Imazalil		0.2 / 0.10
Acephate		0.4 / 0.20		Imidacloprid		0.4 / 0.20
Acequinocyl		2.0 / 1.00		Kresoxim-methyl		0.4 / 0.20
Acetamiprid		0.2 / 0.10		Malathion		0.2 / 0.10
Aldicarb		0.4 / 0.20		Metalaxyl		0.2 / 0.10
Azoxystrobin		0.2 / 0.10		Methiocarb		0.2 / 0.10
Bifenazate		0.2 / 0.10		Methomyl		0.4 / 0.20
Bifenthrin		0.2 / 0.10		Methyl Parathion		0.2 / 0.10
Boscalid		0.4 / 0.20		MGK-264		0.2 / 0.10
Carbaryl		0.2 / 0.10		Myclobutanil		0.2 / 0.10
Carbofuran		0.2 / 0.10		Naled		0.5 / 0.25
Chlorantraniliprole		0.2 / 0.10		Oxamyl		1.0 / 0.50
Chlorfenapyr		1.0 / 0.50		Paclobutrazol		0.4 / 0.20
Chlorpyrifos		0.2 / 0.10		Permethrins		0.2 / 0.10
Clofentezine		0.2 / 0.10		Phosmet		0.2 / 0.10
Cyfluthrin		1.0 / 0.50		Piperonyl butoxide		2.0 / 1.00
Cypermethrin		1.0 / 0.50		Prallethrin		0.2 / 0.10
Daminozide		1.0 / 0.50		Propiconazole		0.4 / 0.20
DDVP (Dichlorvos)		1.0 / 0.50		Propoxur		0.2 / 0.10
Diazinon		0.2 / 0.10		Pyrethrins		1.0 / 0.50
Dimethoate		0.2 / 0.10		Pyridaben		0.2 / 0.10
Ethoprophos		0.2 / 0.10		Spinosad		0.2 / 0.10
Etofenprox		0.4 / 0.20		Spiromesifen		0.2 / 0.10
Etoxazole		0.2 / 0.10		Spirotetramat		0.2 / 0.10
Fenoxycarb		0.2 / 0.10		Spiroxamine		0.4 / 0.20
Fenpyroximate		0.4 / 0.20		Tebuconazole		0.4 / 0.20
Fipronil		0.4 / 0.20		Thiacloprid		0.2 / 0.10
Fonicamid		1.0 / 0.50		Thiamethoxam		0.2 / 0.10
Fludioxonil		0.4 / 0.20		Trifloxystrobin		0.2 / 0.10
Hexythiazox		1.0 / 0.50				
Pesticide Screen	N/A					

*LOQ = Limit of Quantification

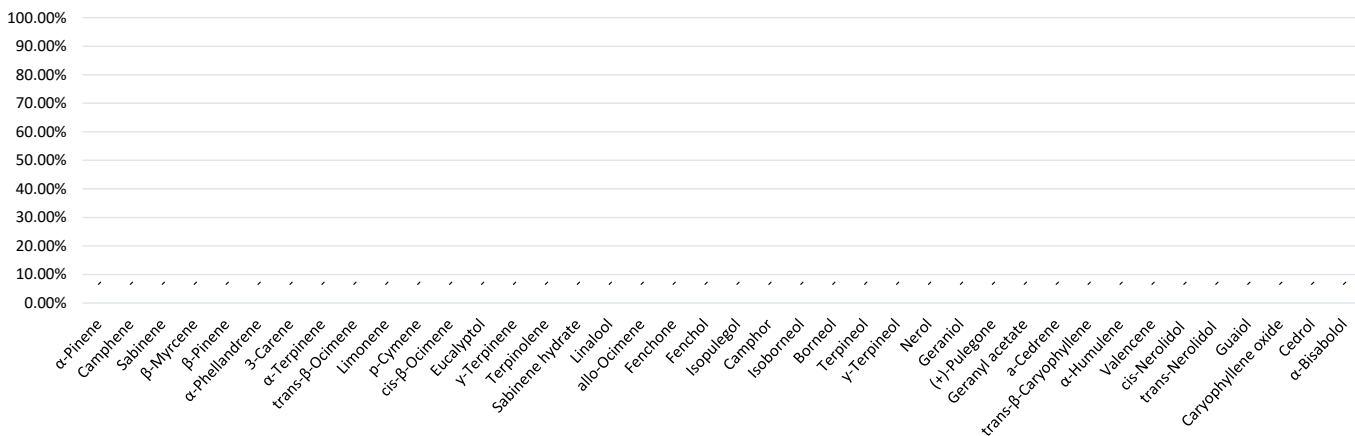
Microbiological Contaminants (Oregon Compliance Standard OAR 333-007-0390)

ANALYSIS DATE: Not Tested			
Microbiological screening	Colony count	CFU/g	Results:
Total coliforms	Not tested	Not tested	N/A
Escherichia coli (E. coli)	Not tested	Not tested	N/A

Terpene Profile

ANALYSIS DATE: Not Tested			Instrument: GC/MS			Method: JA-Terpene-Proprietary		
Compound	µg/g	%	Compound	µg/g	%			
α-Pinene			Isopulegol					
Camphene			Camphor					
Sabinene			Isoborneol					
β-Myrcene			Borneol					
β-Pinene			Terpineol					
α-Phellandrene			γ-Terpineol					
3-Carene			Nerol					
α-Terpinene			Geraniol					
trans-β-Ocimene			(+)-Pulegone					
Limonene			Geranyl acetate					
p-Cymene			α-Cedrene					
cis-β-Ocimene			trans-β-Caryophyllene					
Eucalyptol			α-Humulene					
γ-Terpinene			Valencene					
Terpinolene			cis-Nerolidol					
Sabinene hydrate			trans-Nerolidol					
Linalool			Guaiol					
allo-Ocimene			Caryophyllene oxide					
Fenchone			Cedrol					
Fenchol			α-Bisabolol					
			TOTAL					

Terpene Profile*



* Profile expressed as a percent of total terpenes

Batch QC WorkGroup ID:

Potency PO-2019-12-03-02

Residual Solvents N/A

Pesticide N/A

Disclaimer

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