CERTIFICATE OF ANALYSIS

Juniper Analytics, LLC
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541.382.3796
ORELAP: 4101-001 / OLCC: 10035537931

Client Name:	Global Cannabinoids
Contact Info:	Frank Mulligan
Sample Type:	Broad Spectrum Concentrate
External Batch ID:	GC-BSD952-TF
Harvest/Prod. Date:	10/8/2018
Sample ID:	BSD-952-2030
METRC ID:	Hemp
Juniper Batch #:	18JA1660.01 Composite
Intake Date:	10/9/2018

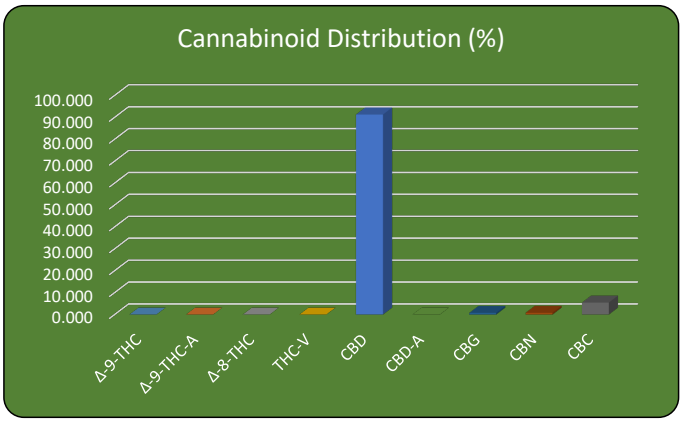
Potency Analysis (Oregon Compliance Standard OAR 333-007-0430)

ANALYSIS DATE: 10/16/2018

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

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	91.307	913.07	1.00
CBD-A	<LOQ	<LOQ	1.00
CBG	0.754	7.54	1.00
CBN	0.824	8.24	1.00
CBC	5.468	54.68	1.00

TOTAL THC/CBD	Weight (%)	Conc (mg/g)	RPD
% THC Total =	<LOQ	<LOQ	0.00%
$\%THC_{Total = (THC\text{-}A * 0.877)+\Delta 9THC}$			PASS
% CBD Total =	91.307	913.07	
$\%CBD_{Total = (CBD\text{-}A * 0.877) +CBD}$			



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

ANALYSIS DATE: 10/11/2018

Instrument: GC/MS
Method: USP 467 - Modified

Solvent	Result (ppm)	RPD
1,4-Dioxane	<LOQ	N/A
2-Butanol	<LOQ	N/A
2-Ethoxyethanol	<LOQ	N/A
2-Propanol (IPA)	<LOQ	N/A
Acetone	<LOQ	N/A
Acetonitrile	<LOQ	N/A
Benzene	<LOQ	N/A
Cumene	<LOQ	N/A
Cyclohexane	<LOQ	N/A
Dichloromethane	<LOQ	N/A
Ethyl acetate	<LOQ	N/A
Ethyl ether	<LOQ	N/A
Ethylene glycol	<LOQ	N/A
Ethylene oxide	<LOQ	N/A
Heptane	<LOQ	N/A
Isopropyl acetate	<LOQ	N/A
Methanol	<LOQ	N/A
Propane	<LOQ	N/A
Tetrahydrofuran	<LOQ	N/A
Toluene	<LOQ	N/A

Solvent	Result (ppm)	RPD
Pentanes;	<LOQ	N/A
-n-pentane	<LOQ	**
-iso-pentane	<LOQ	**
-neo-pentane	<LOQ	**
Butanes;	<LOQ	N/A
-n-butane	<LOQ	**
-iso-butane	<LOQ	**
Hexanes;	<LOQ	N/A
-n-hexane	<LOQ	**
-2-methylpentane	<LOQ	**
-3-methylpentane	<LOQ	**
-2,2-dimethylbutane	<LOQ	**
-2,3-dimethylbutane	<LOQ	**
Xylenes;	<LOQ	N/A
-1,2-dimethylbenzene	<LOQ	**
-1,3-dimethylbenzene	<LOQ	**
-1,4-dimethylbenzene	<LOQ	**
-Ethyl benzene	<LOQ	**
**RPD calculated for combined results		

Residual Solvents	PASS

Tentatively Identified Compounds: None detected

<LOQ - Less than the Limit of Quantification

****Largest hit reported to appropriate governing body; RPD only calculated on samples where the average result is above 50% of the action level.**

Approval

QA Review

Report Date: 10/17/2018

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INTEGRITY AND ACCURACY IN EVERY STEP

Juniper Batch #:	18JA1660.01 Composite
Intake Date:	10/9/2018

Pesticide Analysis (Oregon Compliance Standard OAR 333-008-1190)

ANALYSIS DATE: 10/11/2018 Instrument: LC/MS/MS Method: AOAC 2007.1-modified

Pesticide	Result (ppm)	Action Level / LOQ (ppm)	Pesticide	Result (ppm)	Action Level / LOQ (ppm)
Abamectin	<LOQ	0.5 / 0.25	Imazalil	<LOQ	0.2 / 0.10
Acephate	<LOQ	0.4 / 0.20	Imidacloprid	<LOQ	0.4 / 0.20
Acequinocyl	<LOQ	2.0 / 1.00	Kresoxim-methyl	<LOQ	0.4 / 0.20
Acetamiprid	<LOQ	0.2 / 0.10	Malathion	<LOQ	0.2 / 0.10
Aldicarb	<LOQ	0.4 / 0.20	Metalaxyl	<LOQ	0.2 / 0.10
Azoxystrobin	<LOQ	0.2 / 0.10	Methiocarb	<LOQ	0.2 / 0.10
Bifenazate	<LOQ	0.2 / 0.10	Methomyl	<LOQ	0.4 / 0.20
Bifenthrin	<LOQ	0.2 / 0.10	Methyl Parathion	<LOQ	0.2 / 0.10
Boscalid	<LOQ	0.4 / 0.20	MGK-264	<LOQ	0.2 / 0.10
Carbaryl	<LOQ	0.2 / 0.10	Myclobutanil	<LOQ	0.2 / 0.10
Carbofuran	<LOQ	0.2 / 0.10	Naled	<LOQ	0.5 / 0.25
Chlorantraniliprole	<LOQ	0.2 / 0.10	Oxamyl	<LOQ	1.0 / 0.50
Chlorfenapyr	<LOQ	1.0 / 0.50	Paclobutrazol	<LOQ	0.4 / 0.20
Chlorpyrifos	<LOQ	0.2 / 0.10	Permethrins	<LOQ	0.2 / 0.10
Clofentezine	<LOQ	0.2 / 0.10	Phosmet	<LOQ	0.2 / 0.10
Cyfluthrin	<LOQ	1.0 / 0.50	Piperonyl butoxide	<LOQ	2.0 / 1.00
Cypermethrin	<LOQ	1.0 / 0.50	Prallethrin	<LOQ	0.2 / 0.10
Daminozide	<LOQ	1.0 / 0.50	Propiconazole	<LOQ	0.4 / 0.20
DDVP (Dichlorvos)	<LOQ	1.0 / 0.50	Propoxur	<LOQ	0.2 / 0.10
Diazinon	<LOQ	0.2 / 0.10	Pyrethrins	<LOQ	1.0 / 0.50
Dimethoate	<LOQ	0.2 / 0.10	Pyridaben	<LOQ	0.2 / 0.10
Ethoprophos	<LOQ	0.2 / 0.10	Spinosad	<LOQ	0.2 / 0.10
Etofenprox	<LOQ	0.4 / 0.20	Spiromesifen	<LOQ	0.2 / 0.10
Etoxazole	<LOQ	0.2 / 0.10	Spirotetramat	<LOQ	0.2 / 0.10
Fenoxycarb	<LOQ	0.2 / 0.10	Spiroxamine	<LOQ	0.4 / 0.20
Fenpyroximate	<LOQ	0.4 / 0.20	Tebuconazole	<LOQ	0.4 / 0.20
Fipronil	<LOQ	0.4 / 0.20	Thiacloprid	<LOQ	0.2 / 0.10
Flonicamid	<LOQ	1.0 / 0.50	Thiamethoxam	<LOQ	0.2 / 0.10
Fludioxonil	<LOQ	0.4 / 0.20	Trifloxystrobin	<LOQ	0.2 / 0.10
Hexythiazox	<LOQ	1.0 / 0.50			
Pesticide Screen	**PASS**				

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**

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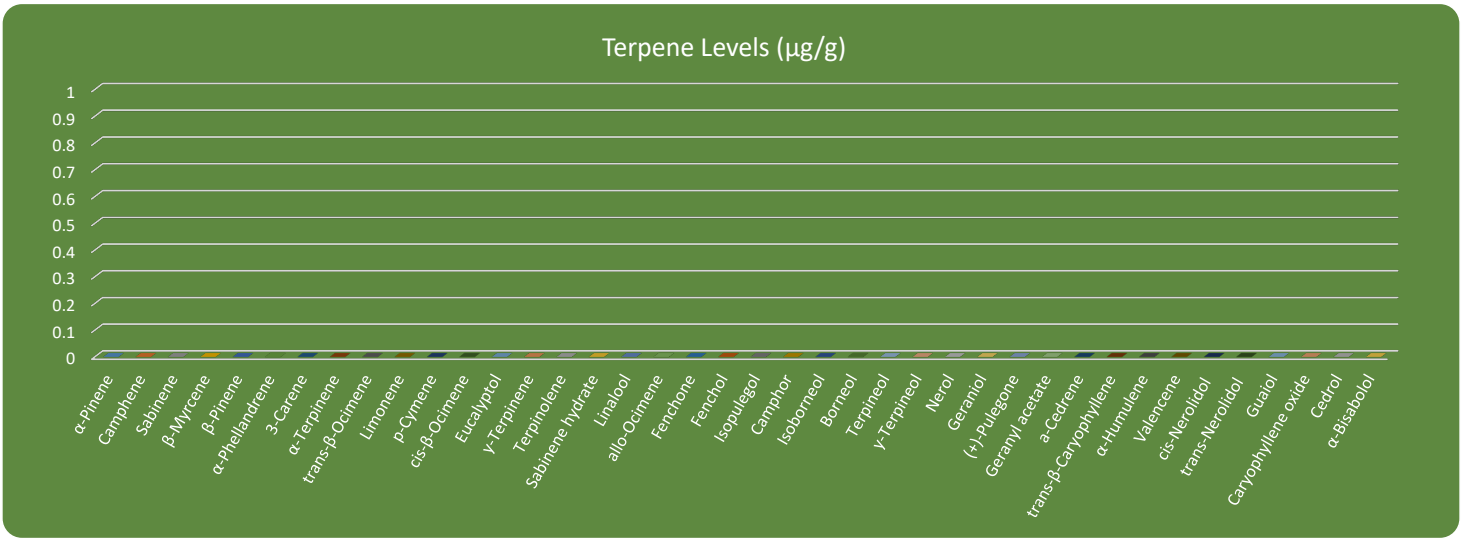
INTEGRITY AND ACCURACY IN EVERY STEP

Juniper Batch #:	18JA1660.01 Composite
Intake Date:	10/9/2018

Terpene Profile

ANALYSIS DATE: Terp Date 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			y-Terpineol		
3-Carene			Nerol		
α-Terpinene			Geraniol		
trans-β-Ocimene			(+)-Pulegone		
Limonene			Geranyl acetate		
p-Cymene			a-Cedrene		
cis-β-Ocimene			trans-β-Caryophyllene		
Eucalyptol			α-Humulene		
y-Terpinene			Valencene		
Terpinolene			cis-Nerolidol		
Sabinene hydrate			trans-Nerolidol		
Linalool			Guaiol		
allo-Ocimene			Caryophyllene oxide		
Fenchone			Cedrol		
Fenchol			α-Bisabolol		
			TOTAL		



Batch QC WorkGroup ID:

Potency PO-2018-10-10-1
Residual Solvents RS-10-08-18-01
Pesticides 2018-10-10-01

Disclaimer